DOCUMENT RESUME

ED 302 348 RC 016 859

AUTHOR Owan, Tom Choken; And Others
TITLE School/Community-Based Alcoholism/Substance Abuse Prevention Survey.
INSTITUTION Indian Health Service (PHS/HSA), Rockville, MD.
PUB DATE 87
NOTE 107p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Adolescents; Alaska Natives; *Alcohol Abuse; *Alcohol Education; Alcoholism; American Indian Education; *American Indians; Children; Community Programs; Drug Abuse; *Drug Education; Elementary Secondary Education; Prevention; *Substance Abuse; Surveys; Youth Problems; Youth Programs
IDENTIFIERS Indian Health Service

ABSTRACT

This report describes school and community efforts to prevent alcoholism and substance abuse among American Indian and Alaskan Native youth. In 1986, the Indian Health Service (IHS) surveyed Bureau of Indian Affairs schools, public schools with large Indian enrollments, and community groups involved in 225 IHS-funded alcohol and substance abuse programs. Of 420 schools responding, 178 used a topical approach to alcohol/substance abuse education, while 86 were involved in one of five specific model programs; these 264 programs had 57,276 student participants on a predominantly weekly format. Program content most frequently included decision making, peer pressure, values clarification, physical and emotional effects of alcohol and substance abuse, and self-awareness and culture identity issues. Intervention activities focused on referral for counseling, psychological enrichment activities, and workshop/training. Observation of student and followup was the most frequently reported evaluation technique. Positive outcomes included increased self-esteem in 104 schools, and decreased disciplinary problems, increased attendance, and reduced substance abuse in about 60 schools each. Of 160 community programs responding, 137 targeted adolescents. Virtually all used topical materials plus one or more model programs; total participants numbered 31,946. Discussion and recommendations accompany each of 12 school and 11 community data tables. The report contains 53 references, data on Indian adolescent alcohol and substance abuse, IHS alcoholism and substance abuse objectives for 1995, brief descriptions of seven model programs, related mortality data, and the survey instrument. (SV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED302348

Indian
Health
Service

School/ Community-Based Alcoholism/ Substance Abuse Prevention Survey

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

RC016859

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration

Indian
Health
Service

School/ Community-Based Alcoholism/ Substance Abuse Prevention Survey

Tom Choken Owan, ACSW
Prevention Consultant (NIMH)
Alcoholism/Substance Abuse Program Branch

Ina C. Palmer, R.N., M.S.
Albuquerque Area Substance Abuse Program Officer

Marina Quintana
Computer Programmer
Data Processing Services Branch

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration
Indian Health Service
Office of Health Programs
Alcoholism/Substance Abuse Program Branch
1987

Foreword

The Indian Health Service (IHS) administers a comprehensive health program serving American Indian and Alaska Native communities. Its primary mission is to elevate the health status of American Indian and Alaska Native people to the highest possible level while encouraging the maximum participation of Tribes in the planning and management of health services. In fulfilling this mission the IHS has identified alcohol, substance abuse, and the diseases associated with alcohol, as the most significant health problem affecting Indian communities. To effectively elevate the health status of Indian and Alaska Native people, alcohol and substance abuse must be eliminated from their communities.

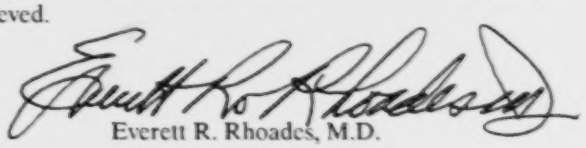
The IHS in cooperation with Indian communities has launched a multifaceted campaign to attack alcoholism and substance abuse. A major component of this campaign is primary prevention based upon education, especially of the young.

The survey information presented in this document was gathered to provide baseline information on the status of these educational efforts and presents a "snapshot" of such activities in Indian and Alaska Native communities in 1986. It demonstrates that a great deal of activity is already underway. The nature of this activity also appears to incorporate the most up-to-date techniques available.

The information in this document describes community development activities that are believed to be necessary to address the emerging destructive alcohol and substance abuse related disease trends in American Indian and Alaska Native communities. Community development is not measured in terms of usual economic indicators; instead, it is viewed as the commitments made by communities to identify and address problems that retard and inhibit personal growth and success. Indeed, it is my belief that economic benefits follow the successes of the spirit demonstrated in communities that are effectively attacking this devastating set of health problems.

In summary, this document captures the attempt of American Indian and Alaska Native communities to initiate primary prevention of alcoholism and substance abuse and thereby eliminate the attendant health problems. It records successes and failures and may serve as a baseline for further community development. It is designed for health providers and educators. Most importantly it is presented to provide inspiration and useful data for program design and development in communities struggling with alcohol and substance abuse. It is my hope that it will serve as an impetus for

those Indian communities prepared to make the collective commitment which is necessary if success is to be achieved.



Everett R. Rhoades, M.D.
Assistant Surgeon General
Director, Indian Health Service

Preface

The year 1986 has been a most auspicious one in the history of alcoholism/substance abuse programs serving American Indians and Alaska Natives. With the passage of the landmark legislation, the Anti-Drug Abuse Act of 1986, which included the principal section of concern to Indian people, Title IV, Subtitle C—The Indian Alcohol and Substance Abuse Prevention and Treatment Act, school/community-based prevention activities have taken a new dimension in addressing this major problem that has plagued Indian communities. The declaration by Congress in 1986 that alcohol and substance abuse among Indian people is their most serious health problem heightens the need to facilitate tribal responsibility for the planning, implementation, and ownership of prevention programs to combat this major problem.

In 1979, the Surgeon General's report, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*, was issued (Richmond 1979). The document cited accomplishments in prevention, identified the major health problems, and established national goals for reducing death and disability. The second document, titled *Promoting Health/Preventing Disease: Objectives for the Nation* (Richmond 1980) set out specific and measurable objectives for 15 priority areas. In response to meeting the goals articulated in the Surgeon General's document and, in particular, the Misuse of Alcohol and Drugs Objectives, the Indian Health Service (IHS) and the Alcoholism and Substance Abuse Program Branch developed IHS Alcoholism/Substance Abuse Objectives for 1995. (See appendix A.) In order to address the national goals and achieve the IHS objectives for 1995, the Alcoholism/Substance Abuse Program Branch, IHS, conducted a Primary Prevention Survey to ascertain what was currently taking place in alcohol/substance abuse prevention and health promotion/disease prevention, in general. The findings of this first survey (Mail and Palmer 1985) indicated that, contrary to earlier assumptions that there was a paucity of prevention activities on alcohol/substance abuse targeted to the Indian population, considerable efforts on health promotion/disease prevention are being undertaken by and for the Indian communities.

In order to build on the first inventory, this second survey, *IHS School/Community-Based Alcohol/Substance Abuse Prevention Survey* was conducted to: (1) determine the extent to which the schools/communities are involved in prevention activities; (2) seek vital information in areas regarding curricula, student/community/agency participation, intervention programs, and mass media programs; and (3) provide a foundation document to enhance and promote prevention activities tailored especially to Indian youths to reduce the risks of alcohol/substance abuse.

The survey was conducted in the fall of 1986 and completed in March 1987. The school/community-based survey questionnaire (see appendix D) was disseminated to

IHS-funded alcoholism programs at the local tribal levels, BIA schools, public schools with large Indian youth enrollment, and public and private service providers. This was done through the help of 12 Alcoholism and Substance Abuse Program Coordinators, IHS area offices.

There are certain limitations in the presentation of the survey results: (l) to the extent that individuals filling out the questionnaires may not be aware of current or new school/community-based prevention program activities within their jurisdiction, there will be underreporting; and (2) because of time constraints and other pressures, the questionnaires from some school/community-based and tribal groups were not completed and are therefore unrecorded. However, the overall returns of the school/community-based questionnaires are considered favorable based on the responses from 420 schools and 160 (71 percent) of the IHS-funded alcohol/substance abuse programs.

This document is divided into the following three sections:

Section I. *Current Data and Prevention/Intervention*

- Introduction
- Current Data on Alcoholism/Substance Abuse Among Indian Youths.
- Prevention/Intervention: Definition, Research, Strategies, and Positive Results.

Section II. *Survey Results*

- School-Based Survey Results
- Community-Based Survey Results

Section III. *Summary*

Acknowledgements

Through their active assistance numerous individuals greatly enhanced this publication. They provided helpful suggestions, timely observations, and data bearing on critical prevention/intervention alcohol/substance abuse trends, measures and approaches targeted especially to Indian youths. The authors wish to express their gratitude for contributions made by:

Russell Mason, Chief, Alcoholism and Substance Abuse Program, IHS, who played a pivotal role in launching the first Primary Prevention Survey in 1985 and the leadership and conceptual framework to embark in this followup survey.

Craig Vanderwagen, M.D., Director, Division of Clinical and Prevention Services, IHS, who provided unflagging support, intellectual as well as administrative, throughout the planning and implementation of this survey.

The Alcoholism and Substance Abuse Program Coordinators, IHS, who were primarily responsible for the coordination of the survey within their respective area jurisdiction.

Anthony D'Angelo, Director, Division of Program Statistics; Charlotte M. Hewett, Chief, Area Health Education Branch; and Eva Smith, M.D., Medical Adviser, Alcoholism and Substance Abuse Program Branch, IHS, provided professional advice, consultation, and service at many stages.

Staff work by Laura West, Agnes Fahey, Jane Adaki, Lori Valla and Virginia Jojola, IHS, assured the successful completion of this publication.

Contents

Foreword	iii
Preface	v
Acknowledgements	vii
Section I: Current Data and Prevention/Intervention	1
Introduction	3
Current Data on Alcohol/Substance Abuse Among American Indian Youths	4
Prevention/Intervention: Definition, Research, Strategies, and Positive Results	13
Section II: Survey Results	17
School-Based Survey Results	19
Community-Based Survey Results	46
Section III: Summary	71
References	73
Appendix A: IHS Alcoholism/Substance Abuse Objectives for 1995	77
Appendix B: Glossary	79
Appendix C: General Mortality Statistics	81
Appendix D: School/Community-Based Alcoholism/ Substance Abuse Prevention Survey	85

Section I: Current Data and Prevention/Intervention

Introduction

This section provides current updated national data on alcohol and substance abuse among Indian youths from studies conducted by three principal investigators, Velma Mason, Fred Beauvais, and E.R. Oetting. Although the studies do not include Alaska Native youths, they represent significant baseline data for analyzing near-term and long-term trends, comparison on Indian and non-Indian use of substance-specific drug use over time, and critical information on age of first use.

A functional definition of prevention/intervention is suggested, permitting service providers and especially the tribes to address, more concretely, the question, "What are you preventing?" Also, intervention strategies based on research findings are presented to provide alternate approaches and to "franchise" exemplary and effective programs.

Current Data on Alcohol/Substance Abuse Among American Indian Youths

In a project supported by the National Institute on Drug Abuse (NIDA), the Western Behavioral Studies Research Office at Colorado State University has been tracking the epidemiology of drug use among American Indian adolescents since 1975. Anonymous surveys on drug use have been administered to 7th-12th grade students from over 30 different tribes throughout the country (Beauvais et al. 1985*a*,*b*; Beauvais and Oetting 1987). The most current estimate is that over 15,000 students have participated in this survey. Table 1, which presents ever-tried rates for nine drugs by Indian 7th to 12th graders, 1975-85, shows marked increases in lifetime prevalence

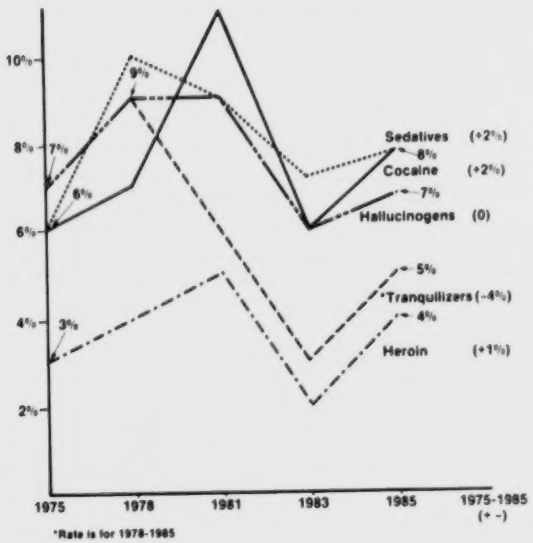
Table 1.—Ever-tried rates for nine drugs for Indian 7th-12th Graders—1975-85 (in percent)

	1975	1978	1981	1983	1985	1975-1985 (- or +)
Alcohol	76	79	85	81	78	+2
Marijuana	41	53	74	70	59	+18
Inhalants	16	26	30	31	25	+9
Stimulants	10	15	24	22	20	+10
Cocaine	6	7	11	6	8	+2
Hallucinogens	7	9	9	6	7	0
Sedatives	6	10	9	7	8	+2
Tranquilizers[a]		9	6	3	5	-4
Heroin	3	4	5	2	4	+1
Total sample size	1,235	3,105	2,159	1,411	1,510	

[a]Tranquilizers—7 year prevalence rate (1978-85); 1975 data not available.

Figure 2

Ever-Tried Rates for the Five Less Commonly Used Drugs Among Indian Youths, 7-12 Grades — 1975-1985

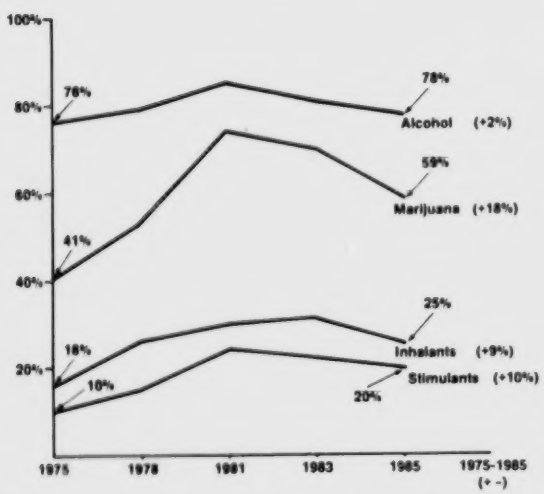


*Rate is for 1978-1985

Note: Adapted from table 1.

Figure 1

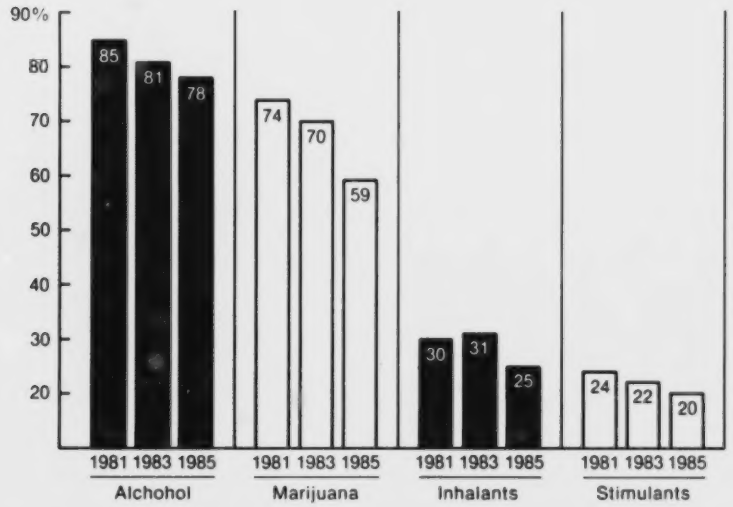
Ever-Tried Rates for the Four Most Commonly Used Drugs Among Indian Youths, 7-12 Grades — 1975-1985



Note: Adapted from table 1, "Ever tried rates for nine drugs for Indian 7th-12th graders—1975-85."

Figure 3

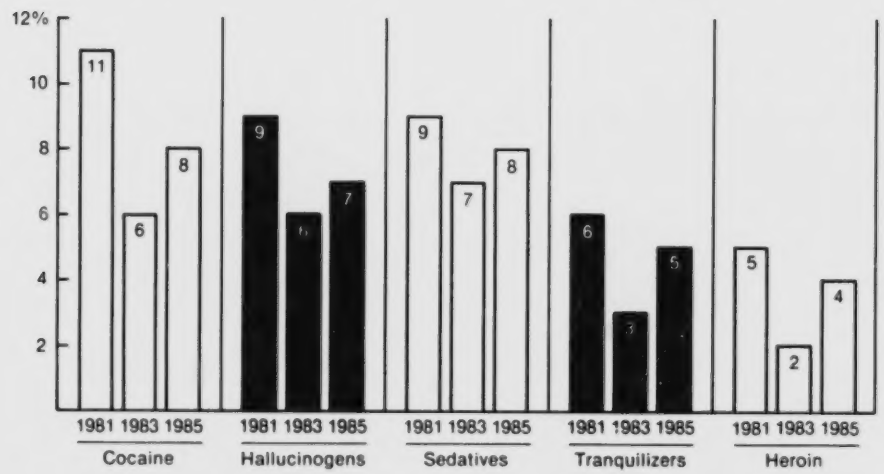
Ever-Tried Rates for the Four Most Commonly Used Drugs Among Indian Youths, 7-12 Grades — 1981-1985



Note: Adapted from table 1.

Figure 4

Ever-Tried Rates for the Five Less Commonly Used Drugs Among Indian Youths, 7-12 Grades — 1981-1985



Note: Adapted from table 1.

between 1975 and 1981 for alcohol, marijuana, stimulants, and cocaine. In subsequent years, 1981 to 1985, a positive downward trend in use of these drugs is shown. Inhalants show a similar pattern, although the decrease is not evident until the period between 1983 and 1985. The remaining drugs (hallucinogens, sedatives, tranquilizers, and heroin) show slight fluctuations from year to year, with no trend evident from 1975 to 1985.

Figures 1 and 2 show the net increase (+) or decrease (-) for the 11-year period (1975-1985) in the ever-tried rates for the four most commonly used drugs and the five less commonly used drugs among Indian youth respectively.

While figures 1 and 2 show an overall increase above, especially concerning the four most commonly used drugs among Indian youths during 1975 to 1985, figures 3 and 4 illustrate the positive downward trend beginning from 1981 and continuing to 1985 for all nine drugs.

Although the overall percentage of drug use among Indian youths appears to be declining [similar trends have been reported for non-Indian youths by Miller et al. (1983)], as indicated by table 2, the current levels are still very high when compared to those of non-Indian counterparts (Beauvais and Oetting, 1987).

Table 2 compares Indian and non-Indian youths on drug usage for 1985. The national sample is from periodic surveys sponsored by NIDA; these data come from interviews conducted in randomly selected households and referred to as the Household Survey. The national sample (N=1,600, 1985) covered 12-17 year olds, similar in age to the

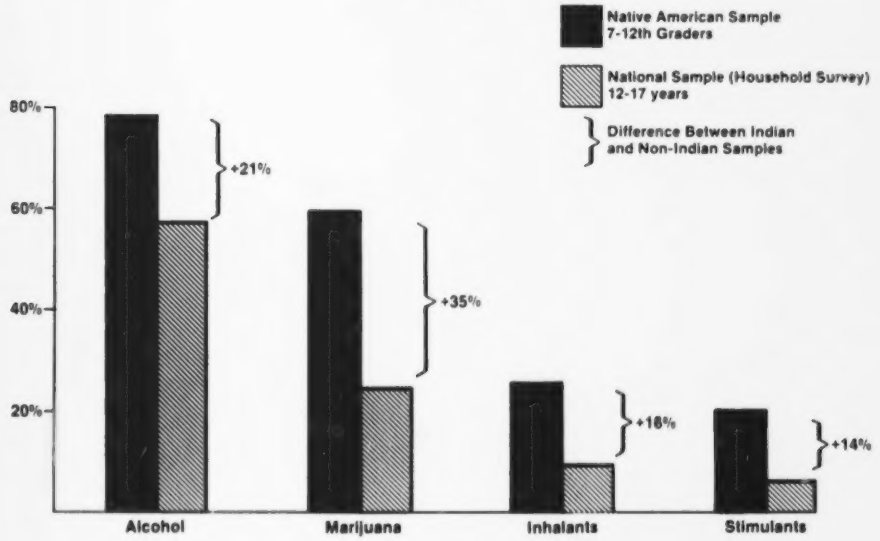
Table 2.—Comparison of Indian and non-Indian adolescents having ever tried drugs: 1985 (in percent)

	National sample (Household Survey) 12-17 years	Native American sample 7-12th graders	Difference between Indian and non-Indian samples
Alcohol	57	78	+21
Marijuana	24	59	+35
Inhalants	9	25	+16
Stimulants	6	20	+14
Cocaine	5	8	+3
Hallucinogens	3	7	+4
Sedatives	4	8	+4
Tranquilizers	5	5	0
Heroin	<5	4	-1

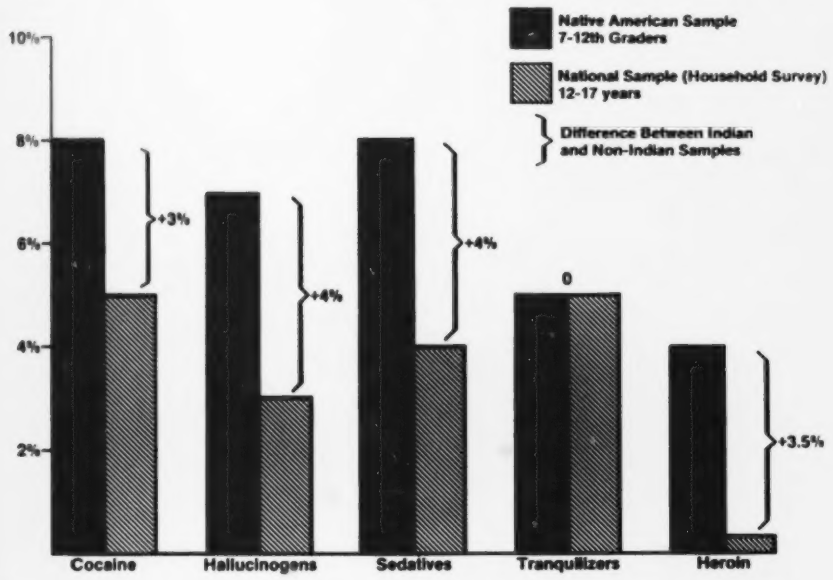
Figure 5

Comparison of Indian and Non-Indian Adolescents Having Ever Tried Drugs: 1985

Part 1



Part 2



Note: Adapted from table 2, "Comparison of Indian and non-Indian adolescents in each drug use type over time."

7th-12th grade students for the Native American Sample (N=1,510) conducted by Beauvais and Oetting (1987). Between the two samples, the sex ratios are quite comparable; the age distributions do differ slightly and show the Indians' sample to be a bit younger. There are some basic differences between the Household Survey and the Native American instrument, which was a school-based survey. Despite these discrepancies in methodology, the overwhelming differences in percentages in all areas of drug usage are too large to be attributable to these relatively minor sample differences.

For the purpose of focusing more sharply on the percentage comparison between the Indian and non-Indian adolescents having ever tried drugs during 1985, figure 5, parts 1 and 2 is presented.

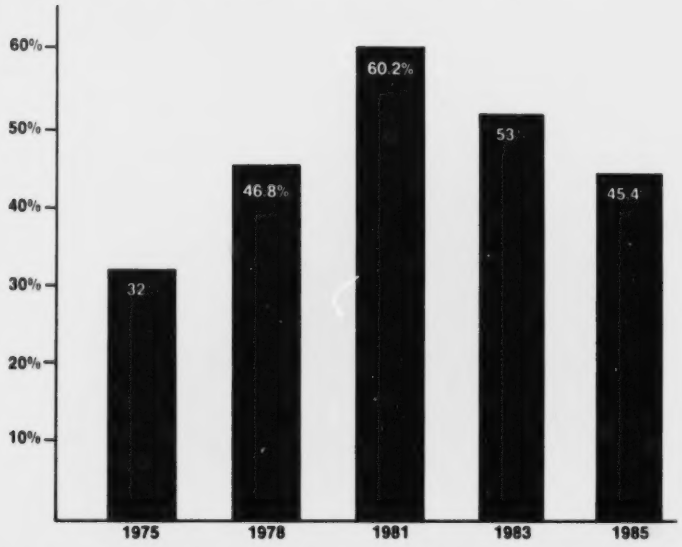
In updating research data Beauvais developed table 3, which presents the percentage of Indian adolescents in drug use types over time. Table 3 is based on a hierarchy of drug use that assigns each student to a drug use type by levels of *current* use of each of those drugs, thus providing more extensive information about total drug involvement than just lifetime prevalence in a population. The eight types are ordered from the most serious to least serious patterns. Students in any of the top five groups are considered at high risk for alcohol/substance abuse. Note that the trends for total percentages in the top five groups parallel those found for lifetime prevalence (table 1), increasing to 1981 and decreasing thereafter.

Table 3.—Percentage of Indian adolescents in each drug use type over time

	1975	1978	1981	1983	1985	(Change 1985-1975)
Polydrug use	3.3	4.8	9.2	3.9	6.0	+2.7
Stimulants and marijuana	2.6	6.2	9.0	6.2	6.1	+3.5
Occasional other drug	4.5	10.3	4.8	9.0	8.6	+4.1
Marijuana and alcohol use	21.4	23.9	36.7	33.0	22.5	+1.1
Heavy alcohol use	0.2	1.6	0.5	0.9	2.2	+2.0
Total—first five groups:	32.0	46.8	60.2	53.0	45.4	+13.4
Ever tried a drug	17.7	15.2	17.4	21.1	20.6	+2.9
Light alcohol use	5.0	10.0	5.2	4.7	13.1	+8.1
Negligible or no use	45.2	28.0	17.2	21.2	20.8	-24.4

Note: Unduplicated count; see text for explanation

Figure 6
Percent of Indian Adolescent at Risk Due to Drug and Alcohol Use: 1975-1985

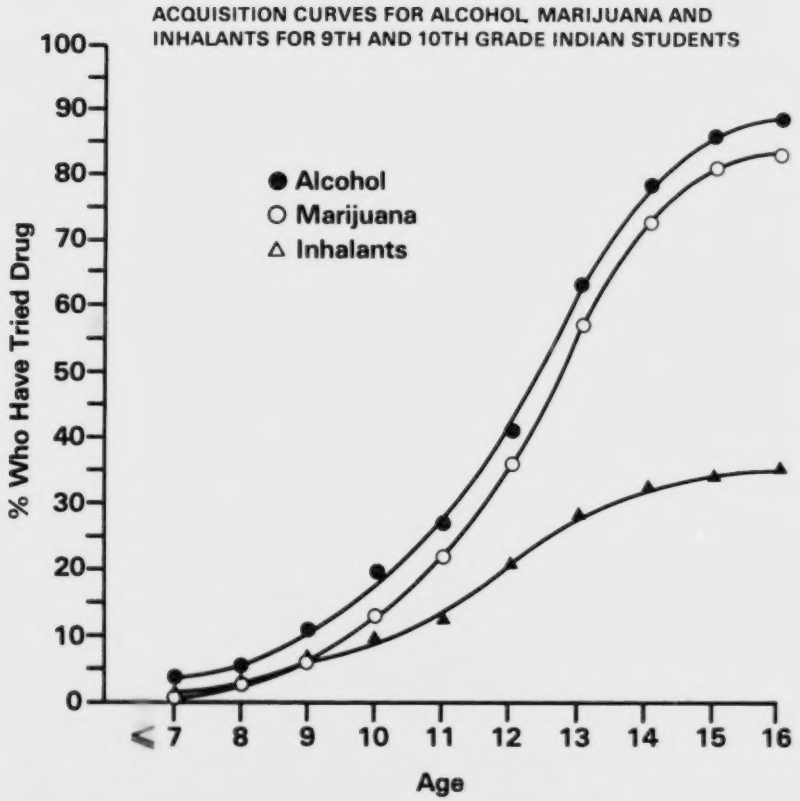


Note: Adapted from table 3, "Percentage of Indian adolescents in each drug use type over time."

A significant finding is that for each of the first five groups covering the span of 11 years, none achieved a decrease but rather all showed an increase in multiple or heavy drug use. When the first five groups' percentage increases are combined, a total of 13.4 percent is recorded for the period 1975-85, a figure that strongly suggests the need to seriously address alcohol and drug problems among Indian youths at high risk. Indeed, it is significant to note that in 1985 nearly one-half of Indian adolescents were at risk of physical or emotional problems due to alcohol or drug use. (See figure 6.)

Because of the need to emphasize *early intervention*, the age of first use involving alcohol, marijuana, and inhalants among 9th- and 10th-grade Indian students is extremely important information. Oetting et al. (1982) developed the "acquisition curve" (figure 7) to illustrate the age of first use. An acquisition curve is constructed by asking youths at which age did they first try a drug. The points on the curve are a cumulative index of age of first use. The pattern in figure 7 shows that Indian youths begin alcohol, marijuana, and inhalant use at a very young age: for alcohol and marijuana there is considerable first-time use at age 13 and beyond—the rate for both drugs rises dramatically up until age 15; and for inhalants, the greatest increase in use occurs between 11 and 13 years old. After age 13 very few youths will use inhalants for the first time, and by age 16, it is very rare for a young person to even begin experimentation with inhalants. If use has not occurred by age 13, it likely never will.

Figure 7



In contrast, according to Beauvais, Oetting, and Edwards, there is considerable first-time use of both alcohol and marijuana beyond age 13, and the rates for both drugs rise dramatically up until age 15. More importantly, those factors leading to alcohol and substance abuse are firmly in place by age 13.

The early use of alcohol among Indian youths is corroborated by earlier community surveys conducted by Whitaker (1962) and Mail (unpublished); by Olsen and Baffi (1982), who reported that 68.8 percent of Indian adults began the use of alcohol between ages 13 and 16; and by Moss and Janzen (1980), who reported that in 20 Indian communities, 32.4 percent of the adults surveyed reported use of alcohol between the ages of 11 and 15. These findings clearly emphasize the need to provide prevention/intervention at a very early age for American/Alaska Native youths.

Another comprehensive study conducted by Velma Mason (1985) on alcohol/substance involvement and self-concept among American Indian youths showed wider experimentation of substances among youth across reservation tribes than ordinarily suspected. The study sampled approximately 1,000 students in grades 7 through

12, of which 54 percent (N=555) were female and 46 percent (N=476) male students. The sample was drawn from schools on reservations of a Southwest tribe, a Northern Plains tribe, a Southeastern tribe, and a Northeastern Woodland tribe.

The findings of the study indicated that the students had high levels of experimentation with drugs and alcoholic beverages. Specifically, 79 percent of the students were engaged in drinking beer, 56 percent reported drinking whiskey or hard liquor, and 50 percent reported drinking wine. Of this experimentation group, 54 percent had started drinking at age 13 and 74 percent claimed they were already drinking regularly when they reached high school age. Similarly, over half (57 percent) reported smoking marijuana; 12 percent started smoking at age 12 and approximately 40 percent reported smoking marijuana regularly by the time they reached high school age.

The study also showed that experimentation with inhalants included using glue, gasoline, paint, aerosols, lighter fluid, and shoe polish in that order of priority for achieving effects. In this sample, 25 percent of the students reported using inhalants; 10 percent reported starting sniffing at age 11, and 19 percent started at about age 13.

The study indicates further that a smaller percentage (15 percent) claimed experimentation with other dangerous drugs, namely, amphetamines with street names such as speed, whites, greenies, dex, bennies, meth, and pep pills. Nine percent said they had experimented with hallucinogens recognized under street names such as LSD, STP, PCP or angel dust, hog, DMT, MDA, and morning glory. Although peyote is ordinarily used only in the Native American Church, as indicated by the 31 percent of students who had used it solely for religious purposes, an additional 7 percent claimed experimenting with this substance outside the church. Finally, 6 percent claimed experimenting with cocaine, and 3 percent said they had tried heroin.

In summary, although the studies cited here by Mason, Beauvais, Oetting and Edwards are limited to the extent that Alaskan youths were not included, they strongly suggest that drug involvement among Indian youths when compared with the national sample is very high, especially for alcohol, marijuana, and inhalants. The studies also suggest that *early intervention*, targeted to Indian youths, is paramount to combat alcoholism and substance abuse.

Prevention/Intervention: Definition, Research, Strategies, and Positive Results

Definition

The term "prevention" generally encompasses primary, secondary, and tertiary prevention. For the purpose of this survey, prevention is defined as activities designed for health promotion/disease prevention or those measures undertaken to avoid the onset of a predetermined disorder, including efforts to reduce risk factors. Secondary prevention, which will be referred to here as intervention, includes activities that seek to detect alcohol/substance abuse-related problems in the early stages and to intervene in such a way as to reduce the severity of the disorder.

Programs for health promotion and/or disease prevention are primarily educational rather than clinical in conception and operation. Intervention efforts are action oriented and provide Indian tribes the opportunities for the development of appropriate and effective programs especially aimed at Indian youths to decrease the incidence of alcohol/substance abuse.

Research

In 1984, the National Institute on Drug Abuse reviewed research on school-based substance abuse prevention programs (Bell and Battjes 1985). The review identified six basic approaches: drug abuse education and affective education as educational modes; alternative programs; psychosocial approaches (resistance strategies referred to as "social inoculation") and personal and social skills training; and cognitive-developmental training, which focuses on physiological reactions to smoking experimentation and user perceptions.

The research findings revealed that "fear arousal messages" were particularly unsuccessful; results indicated an increase in the level of drug use by program participants. Also, the affective educational programs, tailored to meet the children's social and emotional needs including training in decisionmaking skills, indicated little or no effect on levels of drug use, since they did not provide the children with specific skills to resist drug usage. A negative outcome on drug usage was evident from alternative programs, such as community projects that did not focus on drugs per se, but that aimed at reducing alienation by providing young people with opportunities for recreation, socialization, and education.

The research review indicated that psychosocial approaches offer the most promising conceptual framework to reduce the onset of drug use (Jones and Bell 1986). The psychosocial approaches included (1) teaching by a classmate, older peer, or teacher specific techniques for resisting social pressures (Say No strategy or social inoculation, role play, modeling) followed by booster sessions, (2) social contracts (commitment not to use drugs), and (3) development of coping skills, some substance specific and others presented within the context of a comprehensive school health program. While this particular research on approaches used in models did not specifically identify Indian youths in this study, the findings have important applications for Indian youths, since they identify productive approaches for school-based prevention programs.

In a new study, Beauvais and Oetting (1987) state that a teenager's friends are the single most important contributor to adolescent drug use—they shape attitudes about drugs, provide drugs, provide the social opportunities for drug use, and share ideas and beliefs that become the rationale for drug use. Oetting and Beauvais recommend that drug abuse prevention/intervention efforts should aim at influencing a teenager's choice of peers, so that he or she forms close friendship or "peer clusters" that view drug use as unacceptable behavior. Drug abuse treatment programs, they emphasize, should place more focus on helping patients break ties with existing friends and develop a more positive relationship with others who do not tolerate drug use.

Peer clusters differ from peer groups. Peer groups tend to be large groups of teenagers who are in the same grade in school or share other broad commonalities. In contrast, peer clusters tend to be small, tightly knit groups that have similar attitudes, values, and beliefs. The researchers believe there are a number of critical factors that may increase or decrease a youth's probability of becoming involved in the use of alcohol or substance abuse, e.g., poverty, prejudice, family relationships, community characteristics, personality traits, religious beliefs, and the child's needs and values. Such factors, they say, overlap in ways that either make youths susceptible to drug involvement or "inoculate" them against drug abuse.

Oetting and Beauvais reported evidence supporting the peer cluster theory from a research project involving 415 high school juniors and seniors who were evaluated for a variety of characteristics associated with drug abuse. Oetting pointed out that any treatment or prevention program that does not ultimately lead to changes in peer associations may be doomed to failure.

Findings from Mason's 1985 study on Native American adolescents suggested that schools served as a positive source of identity for students who resisted involvement in drugs and alcohol. The students in the sample liked school, had high expectations for graduation, had families who encouraged them to be good students, and found the schools to be no longer a source of cultural conflict for them. Also, if the student did not perceive any stability for himself or herself in the home or within the tribe, the school was perceived as an alternative source of stability and/or identity for one's self-concept. Therefore, Mason recommended that schools should emphasize this identity as well as create a more stable sense of bicultural identity for all Native American students as part of their prevention program. Such an identity, Mason concluded, may be encouraged by integrating and reinforcing traditional tribal cultural elements into the school curriculum, especially activities that reinforce values which help adolescents through their transition phase between adolescence and adult maturity.

The stability of family and cultural identification is crucial to the prevention of alcohol and substance abuse. Red Horse (1980) recommended actions that would contribute to the strengthening of family and the development of coping skills; Mason (unpublished) found that stability of home and family may have a greater influence on determining the propensity to substance abuse among Indian youths; Swanson et al. (1971) found that youths who are involved in substance abuse come from predominantly disrupted families; and Oetting and Beauvais (1982) found that Indian children who are bicultural, identifying with both Indian and non-Indian traditions, showed the lowest alcohol and drug use.

Strategies

May (1986) offers the following strong rationale for placing emphasis on educational programs targeted to Indian youths:

- In virtually all tribes, Indian youths are more highly socialized than are their parents to accept mainstream educational concepts.
- Virtually one-half of all tribes are of school age or younger and therefore are readily accessible.
- Prevention of alcohol and drug misuse will begin with new use patterns of behavior in the coming generations.
- The toll of alcohol and drug related deaths is the greatest in those aged 15 to 40, so they must be reached before or early in this age range.

Thus, May advocates that a major, if not the dominant, component of the prevention programs aimed at Indian youths should emphasize a social learning model that builds self-esteem and coping skills in individuals and their peer groups while imparting alcohol and drug information.

Because there is great diversity in strategies for alcohol and substance abuse prevention/intervention, the following major distinctions in program content and delivery methods are offered (Springer and Phillips 1986):

Program Content

- *Informational strategies* rely on providing "enough information so that people can make rational decisions for themselves" (Braucht et al. 1973). Course content focuses on providing facts and physiological/psychological consequences of drug use without crusading against drug use.
- *Persuasive strategies* attempt to influence attitudes or behavior through persuasive messages that do not rely heavily on factual information.
- *Affective strategies* operate on the premise that drug abuse is more likely among individuals lacking skills that enhance self-concept and interpersonal competence, e.g., decisionmaking skills, communication, self-assertion, and self-value.
- *Environmental strategies* seek to prevent drug abuse through strengthening the social and organizational environment for those at risk (e.g., alternative recreation programs).

Delivery Mechanisms

- *Outside trainers* are used in some programs to present information or skills training. In this case the trainer or expert does not have an ongoing relation with the recipients.
- *Trained mediaries* such as teachers may delivery a program. In this case the person delivering the message has on ongoing relation with recipients.
- *Parents or peers* are utilized as agents for prevention activities in some programs. Parents may be trained in family-based prevention activities, and peers have been used for counseling and support group activities.
- *Media and public events* have been used to conduct informational and persuasive strategies aimed at the community.

Positive Results

While few significant empirical impact studies concerning the effectiveness of a primary prevention program have been documented to date (Kim 1981:359), past evaluation studies have revealed promising program strategies and delivery mechanisms that should be followed. These promising findings are related to (1) characteristics of target populations, (2) the choice of program strategies, and (3) the degree of program intensity (Springer and Phillips 1986):

- *Target populations.* Several studies have found drug education programs targeted at adults to produce positive effects on drug-related attitudes and behavior (Kinder et al. 1980; Bruhn et al. 1975). However, evaluations have shown mixed results for adult populations, and "attempts to delineate the important variables related to successful outcomes (e.g., population variables, instructional styles) have not yielded conclusive results" (Kinder et al. 1980:1051).
- *Program Strategies.* While far from definitive, past evaluations suggest that prevention strategies that go beyond purely informational content to promote affective skill building (e.g., family decision skills, self-esteem, decisionmaking, refusal skills) provide more positive results (Schaps et al. 1981; Moskowitz et al. 1984). There are also indications that programs that involve parents and peers produce more positive and lasting effects than those that do not (Schaps et al. 1981).
- *Program Intensity.* Prevention programs vary significantly in intensity—the "duration, scope, and persistence of services" (Schaps et al. 1981). Schaps et al. categorized 127 evaluations as "low," "medium," or "high" in intensity and found a suggestive positive relation between intensity and program effectiveness.

In summary, the prevention/intervention data, definition, research, strategies, and positive results concerning what might work should help shape and produce more positive program results especially aimed at Indian youths.

Section II: Survey Results

School-Based Survey Results

Introduction

This part of section II, which presents findings, discussion, and recommendations for each of the subject areas surveyed in the school-based survey, has been organized to provide users and providers of services a data base for setting a course of action that is responsive to the needs of Indian youths. Tables are presented with findings, a discussion of relevant subjects to illuminate the findings, and recommendations to provide corrective actions, modifications, and the refocusing of programs to reflect the priority needs of Indian youths.

The school-based survey was conducted through the Alcoholism and Substance Abuse Coordinators, IHS, who contacted their respective school representatives soliciting their support for the completion of the questionnaires. The dissemination of the questionnaires to the public/private schools was targeted primarily to schools with a fairly large enrollment of Indian youths, based on the Indian population figures for the community.

With the exception of the BIA schools and the Tribal PL 93-638 contract schools, there are no available data regarding the number of public and private schools serving Indian youths.

Categories of Schools Responding to the Survey

School-based table 1.—Categories of schools that responded to the questionnaire—nationwide totals (N=420)

Category	Respondents	
	No. of schools	Percent
Head Start/early childhood education	73	17
Elementary	138	33
Junior high/middle school	110	26
Senior high	99	24
Total	420	100

Findings

Nationally 420 schools responded to the questionnaire. The greatest response was received from elementary schools (33 percent), followed by junior high/middle schools (26 percent), senior high schools (24 percent), and Head Start/early childhood education (17 percent).

Discussion

There is no accurate count nationally of the number of public schools that serve large numbers of Native American/Alaska Native students. However, the schools that responded to the survey indicated partially or fully developed (K-12) comprehensive health promotion/disease prevention programs that included alcohol/substance abuse prevention/intervention activities.

Recommendation

The IHS, BIA, and tribal organizations should collaborate with schools to increase the number of schools in each category (Head Start, elementary, junior high/middle, and senior high) to develop and implement a comprehensive health promotion/disease prevention program including alcohol/substance abuse.

Categories of Schools by Agencies

School-based table 2.—Categories of schools by agencies involved in alcohol/substance abuse—nationwide total
(N=420)

Schools	BIA	Tribal/ PL 93-638 contract	Public	Parochial/ private	Other	Total
Head Start/early childhood education	0[a]	23	0[a]	1	49	73
Elementary	34	19	76	8	1	138
Junior high/ middle school	19	19	66	4	2	110
Senior high	14	17	65	1	2	99
Total	67	78	207	14	54	420

[a]The BIA and public schools are not required to administer Head Start/early education programs.

Findings

The survey revealed that 420 schools (Head Start through 12th grade) with large American Indian/Alaska Native youth enrollment participated in providing prevention and intervention program activities on alcohol/substance abuse.

Of the categories of schools by agencies, the greatest number implementing substance abuse prevention program activities were the public schools (207) followed by Tribal/PL 93-638 (78), BIA (67), other (54), and parochial private (14).

Within the categories of schools, for the Tribal/PL 93-638 contract, Head Start/early childhood education had the highest participation (23) while for both the BIA (34) and the public (76) schools, the elementary schools had the highest participation.

Discussion

In 1986, BIA was accountable for 180 schools represented by 58 elementary schools (1-6); 95 elementary/secondary schools (K-12); and 27 secondary schools (7-12).

Of the 180 schools under the jurisdiction of BIA, 78 schools were administered under Tribal/PL 93-638 contract. It is impressive to note that 100 percent of the PL 93-638 contract schools (78) were involved in the school-based alcohol/substance abuse program. When both the BIA (67) and the PL 93-638 contract schools (78) figures are

combined, they represent an 81 percent participation among the BIA-administered schools.

Recommendations

By 1990, all BIA schools should be involved in age-specific chemical use and abuse programs and should integrate their comprehensive health education curriculum to include alcohol/substance abuse as a major component.

Program Participation Within Areas

School-based table 3.—Schools within IHS areas—nationwide totals
(N=420)

Area	Head Start/ early childhood education	Elementary school	Junior high/ middle school	Senior high school	Total
Aberdeen	4	8	8	9	29
Alaska	9	14	14	14	51
Albuquerque	11	21	14	11	57
Bemidji	8	11	10	10	39
Billings	3	12	8	6	29
California	7	1	2	2	12
Nashville	8	8	6	6	28
Navajo	6	24	14	9	53
Oklahoma City	0	1	1	2	4
Phoenix	10	16	15	14	55
Portland	6	17	15	15	53
Tucson	1	5	3	1	10
Total	73	138	110	99	420

Findings

The areas (related to the IHS Area Office jurisdiction) with minimal school participation in alcohol/substance abuse prevention programs were: Oklahoma City (4), Tucson (10), California (12), Nashville (28), Aberdeen (29), and Billings (29), as compared to the Alaska, Portland, Phoenix, Navajo, and Albuquerque areas, all exceeding 50 schools each.

Discussion

In order to provide some analysis for high-risk areas on alcohol abuse mortality in each of the service areas, the table, "All Alcohol Abuse Mortality," shows data by the critical measure of years of productive life lost (YPLL), a mortality index that measures the years of life lost between death and age 65. This measure (YPLL) has been incorporated into the IHS evaluation procedure to assess the major trend of program impact associated with achieving the IHS Objectives for 1995.

IHS table 1.—All alcohol abuse mortality[a]

	Deaths		YPLL	
	Number	Rate[b]	Number[c]	Rate[d]
United States, 1982	31,993	12.3	310,504	151.5
IHS, 1982-83				
All areas	1,025	52.7	18,469	743.4
Aberdeen	110	89.3	1,965	1,026.1
Alaska	46	32.7	809	418.0
Albuquerque	68	75.9	1,273	907.7
Bemidji	35	39.7	367	286.3
Billings	102	136.9	1,872	1,725.7
California	33	20.9	368	188.1
Nashville	23	35.0	235	290.0
Navajo	107	34.1	2,507	570.8
Oklahoma City	149	32.8	2,403	479.0
Phoenix	183	103.6	3,732	1,666.9
Portland	136	79.0	2,233	955.4
Tucson	33	97.9	705	1,450.9

Source: *Indian Health Conditions*, U.S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration, Indian Health Service, 1986 (unpublished).

[a]National Center for Health Statistics data for underlying cause of death.
[b]Annual age-adjusted rate per 100,000 population.
[c]YPLL for persons who die between birth and age 65.
[d]Annual rate per 100,000 population.

The four areas with the highest YPLL rates are Billings, Phoenix, Tucson, and Aberdeen. These areas have exceedingly high YPLL rates when compared to the U.S. rate: Billings and Phoenix are 11 times the U.S. rate, Tucson is 10 times the U.S. rate, and Aberdeen is 7 times the U.S. rate. Further, three of these areas, Billings, Tucson, and Aberdeen, had minimal participation in school-based prevention. There is valid justification for the redirection of efforts to strengthen school- and community-based prevention and intervention efforts.

Recommendations

With regard to two specific concerns, that is, areas with an exceedingly high YPLL and areas with only minimal school-based response, area officers in the following affected areas should carefully address and develop an action plan to reduce the YPLL and/or increase school-based prevention and intervention activities: reduction of YPLL and increased school-based prevention and intervention activities—Billings, Tucson, and Aberdeen; reduction of YPLL—Phoenix; increased school-based involvement in prevention and intervention—Oklahoma City, California, and Nashville.

Issues for Curriculum Planning

School-based table 4.—Issues and concerns for curriculum program planning—nationwide totals
(N=1,314)

Issues and concerns	Number	Percent
Low self-concept	138	11
Alcoholism	130	10
Attendance problem	119	9
Low academic achievement	114	9
Disciplinary problem	109	8
Marijuana	102	8
Inhalants	95	7
Truancy	92	7
Cigarettes	84	6
Smokeless tobacco	71	5
Teenage pregnancy	71	5
Health problems (i.e., obesity, handicap, pregnancy)	65	5
Required by State law or policy	59	5
Other	25	2
Cocaine	18	1
LSD	13	1
Crack	9	1
Total	1,314	100

Findings

Overall, the alcohol/substance abuse curriculum was developed based on concern regarding issues dealing with students' low self-concept (11 percent), alcoholism (10 percent), attendance problem/low academic achievement (9 percent each), disciplinary problem/marijuana (8 percent each), and inhalants (7 percent).

It is interesting to note that while national attention on drug abuse has focused on the use of cocaine, crack, and LSD, the survey revealed that the use of these drugs did not appear to be a serious threat to the student population at this time; however, the use of marijuana and inhalants among Indian youths continues to be a serious problem. (See section I.)

Discussion

Low self-esteem with its concomitant problems of low academic achievement, and disciplinary problems, together with their related problems of alcohol/substance abuse, all have a wide-ranging negative influence on individual conduct.

Topics of current concern expressed by the National Indian Board on Alcohol and Drug Abuse (NIBADA) Youth Council composed of 30 Native American/Alaska Native representatives from reservations, Alaskan villages, and urban areas were the following (Mackey 1987):

Culture
Sex abuse
Sexual awareness
Leadership
Positive thinking
Alcohol/drug awareness
Tribal issues
Law enforcement
Positive role modeling
Tribal government
Health services
Children of Alcoholics services
Child neglect/abuse
Goal setting
Drug-free activities
General sessions
Alcoholics Anonymous/Narcotics Anonymous
Teenage suicide and prevention
Coping with parents
Elder guest speakers
Group discussions
Fitting into white society
Dealing with stereotypes
AIDS
Social activities
Available funds
IHS and BIA question and answer
Dating relationships
Assertiveness

Recommendations

Schools together with tribal groups should clearly provide priority consideration to include meaningful curricula that address issues and concerns in ways that can enhance and facilitate joint community efforts for education and intervention approaches. Serious consideration should be given by school personnel to include the NIBADA Youth Council's topics of concern for program planning.

Technical assistance from IHS, BIA, and tribal groups should be offered to schools in developing appropriate and acceptable Head Start to 12th grade health education emphasizing youth alcohol/substance abuse, teenage pregnancy, child sexual abuse, coping skills, and family relationships.

Networking

School-based table 5.—Selected employees and other attendees networking with community groups in school-sponsored alcohol/substance abuse prevention programs

	Number	Percent
BIA employees		
Teachers/aides	92	33
Administration	64	23
Social services	38	14
Police	34	12
Counselors	30	11
Others	19	7
Total	277	100
IHS employees		
Mental health	69	26
Community health nursing	67	25
Health education	49	19
Social services	48	18
Nutrition	20	8
Others	10	4
Total	263	100
Tribal employees		
Tribal officials (leaders council members)	370	44
School teachers	145	17
Alcoholism	108	13
Community health representatives	79	9
Social services	67	8
Administration	32	4
School counselors	28	3
Mental health	4	1
Police	4	1
Total	837	100
Other attendees		
Parents	649	86
Teachers	102	14
Total	751	100

Findings

There are strong indications of excellent agency networking with community groups in school-sponsored alcohol/substance abuse prevention programs under the umbrella of health promotion/disease prevention activities. A total number of 1,377 agency employees networked with community groups in connection with the school-based programs tribal employees (837), BIA (277), and IHS (263).

Among the BIA employees, the groups that represented the largest participation in school-sponsored alcohol/substance abuse program activities were teachers/aides (33 percent) and the administrative staff (23 percent).

For the IHS employees, mental health (26 percent) and community health nursing (25 percent) were prominently involved in school sponsored alcohol/substance abuse program activities followed by health education (19 percent) and social services (18 percent).

For tribal employees, tribal officials had the highest participation (44 percent), followed by school teachers (17 percent) and employees representing alcoholism (13 percent).

Among the "other attendees" category, most were parents (86 percent), followed by teachers (14 percent).

Although the parents in the other attendees category represented the largest number (649), from a national perspective this was a poor attendance figure when compared to the more than 57,000 students (table 6) who were involved in their school-based prevention programs.

Discussion

A sound base for collaboration between the schools and agencies has been established, and there is a need to enhance this mutual working relationship to facilitate prevention services to Indian youths.

Recommendation

Based on a successful public health demonstration project targeted to Indian adolescents and youths in the Pueblo and Navajo communities (Davis et al. 1985), serious consideration for replication should be made by school/community groups. The centerpiece was the use of a Teen Advisory Group to develop program ownership and implementation. The following are prime examples of accomplishments:

- Performed improvisational, health-related skits for their families, peers, and tribal leaders
- Prepared a peer-targeted, teen-health-oriented newsletter
- Produced health-related, peer-oriented videotapes
- Presented workshops at schools in New Mexico to promote the development of more teen-conducted projects and to address topics such as alcohol/substance abuse, suicide, pregnancy, family violence, and student advocacy

- Served as positive role models to students in the participant's own school and in other schools
- Expressed, through surveys, their reactions regarding the quality and effectiveness of services
- Sponsored and organized Teen Health Awareness Days programs
- Taught fellow and elementary-age students in the classroom

School Programs

School-based table 6.—Alcohol/substance abuse programs presented in schools with concentrations of American Indian and Alaska Native students, September 1985-June 1986

Programs	Students	School	Sessions	Session frequency			
				Weekly	Biweekly	Monthly	Other
Topical (alcohol/substance abuse related curriculum)	44,370	178	2,545	77	18	24	54
Here's Looking at You	4,927	23	987	15	4	2	5
BABES	3,426	26	270	15	2	5	3
Project Charlie	3,128	22	398	15	0	4	1
Children Are People Too	917	7	137	5	0	0	1
Dare to Be You	508	8	36	3	1	1	4
Total	57,276	264	4,373	130	25	36	68

Note: Because the schools may conduct one or more programs, and the students may have participated in more than one program, the total count for these two columns may represent duplicate counts. Nevertheless, it is important to note the level of student participation (57,276) plus the total sessions (4,373).

Findings

Of the 420 schools nationwide, a total of 264 schools (including Head Start/early childhood education, elementary, junior high/middle school, and senior high schools) were utilizing one or more of the curricular programs specified above.

It is significant to note that positive inroads are being made on the utilization of model programs such as Here's Looking at You, Project Charlie, BABES, and Dare to Be You. The 264 school program activities had a total of 57,276 participants on a predominately weekly session format, with total sessions numbering 4,373.

Discussion

Based on the approximately 50 percent of Indian youths who are considered at risk for alcohol and substance abuse, the teacher's role becomes very important to (l) identify behaviors of children from substance abuse families, (2) provide a supportive learning environment, and (3) improve their self-image and academic achievement.

Some of the prime examples of effective training practices in Indian education concerning substance abuse prevention are as follows (de la Garza 1987):

Giving Positive Empathy

- Clearly, all children need affection and attention from their teachers. Children from substance abuse families, however, sometimes are in critical need for empathy and encouragement. Many don't receive physical affection.

Socialization

- It is important that these children learn how to relate to other children. Many have never learned how to start up or maintain personal friendships. Home role models of these children may be the opposite of what schoolmates require for friendships. Student adult relationships are also helpful. Introduce your students to other teachers, group leaders, etc.

Physical Exercise

- Aggressively encourage physical exercise. Many of these children are under intensive stress and need tension outlets.

Survival Skills

- In a safe classroom setting, discuss survival skills that children from substance abuse environments can use.

Education About Substance Abuse

- Educate the children about the nature of substance abuse. Concentrate on what is of immediate interest to children, i.e., effects on appearance, anger, and driving coordination.

Parental Substance Abuse

- After establishing a nonthreatening atmosphere, discuss experiences children go through when substance abuse occurs at home.

Nonjudgmental Attitude

- Be a good role model. Learn to discuss parental substance abuse without disdain. Remember, children love their parents in spite of problems.

Understanding Parents

- Explain, demonstrate, and discuss how you can love someone and not always like what they do. Show them how hurting statements and actions of parents can be the result of intoxication, *not* reality. Show how a parent's drug use does not mean that the parent does not love them.
- By emphasizing the effects of intoxicants, both during and after use, show how a parent's drug use is not the children's fault, and how there is nothing they can do to stop it.
- Help the child to understand that they are not alone—that parental substance abuse is a problem shared by many children.
- Reassure these children that there is hope based on new treatment attitudes.

Demonstrating Understanding

- Let the children know that you are aware of the difficulties that are involved with being from a substance abuse home and that you know they are not responsible for the consequences of their family's substance abuse.

Anonymity

- In all cases, prudent care should be taken to protect the privacy and confidentiality of the child and family.

Self-Image

- Give the children tons of repeated encouragement and compliments. "You have a good way of thinking" and "I like you" are welcome teacher statements. Positive statements and demonstration of trust are the very best way of helping.
- In providing self-image enhancement, consider that the child may be receiving 10 negatives a day at home. Repeated positives may be required to turn the negatives to positives.

Recommendation

Every school, Head Start through 12th grade, should develop and establish appropriate prevention and intervention programs on alcohol/substance abuse as part of its health program.

The following key elements should be included in developing a sound prevention program targeted to Indian youths:

- provide effective teacher training to work with high-risk Indian youths
- provide a Head Start through 12th grade prevention program sequence
- integrate a prevention program into an existing curriculum
- incorporate the prevention program into a comprehensive health education program

In order for the curriculum to be part of a comprehensive school/community program, the development and implementation of the curriculum should:

- include input from parents, tribal groups, and youths
- be carried out at the local level
- fit with intervention and treatment services for abusers and services for children in alcoholic and drug-dependent families

Education Content

School-based table 7.—Content utilized most frequently involving alcohol/substance abuse education—nationwide totals
(N = 1,304)

Content	Number	Percent
Decisionmaking	146	11
Peer pressure	136	10
Values and attitude clarification	126	10
Physical and emotional effects of alcohol/substance abuse	126	10
Self-awareness and culture identity issues	126	10
Effective communication	97	7
Risks to children of alcoholics	94	7
Positive imagery	94	7
Fetal alcohol syndrome prevention	88	7
Assertiveness	83	6
History of alcoholism/substance abuse among American Indians/Alaska Natives	66	5
Family bonding and enrichment	61	5
Others	35	3
Separation trauma	26	2
Total	1,304	100

Findings

With respect to content utilized most frequently, there was an even spread among subjects, such as decisionmaking (11 percent); peer pressure, values and attitude clarification, physical and emotional effects of alcohol/substance abuse, self-awareness and culture identity issues (10 percent each); and effective communication, risks to children of alcoholics, positive imagery, fetal alcohol syndrome prevention, and assertiveness (7 percent each).

Discussion

Overall, the schools have responded to the major issues and concerns for curriculum programs planning (section II, school-based table 4) with relevant subject content to address the concerns. The schools have made great strides from one-shot presentations with facts and scare tactics to a more balanced presentation of providing current

factual information together with increasing coping skills, self-esteem, intervention approaches, etc.

The development of alcohol/substance-abuse prevention programs targeted to Indian youths is a collaborative effort. It requires input from parents, youths, tribal leaders, school staff, and the appropriate public and private agencies. Culturally relevant content should reflect local and regional traditions, ceremonies, and values (Schinke et al. 1985).

Drugs and alcohol facts will interest youths when disseminated through age-relevant films, videotapes, and slide shows (Schinke et al.). Decisionmaking skills can enable young people to build social competence and self-esteem (La Fromboise 1982; La Fromboise and Rowe 1983; Schinke and Gilchrist 1984). In addition, developing non-verbal and verbal interpersonal skills can assist Indian youth to cope more effectively to achieve personal goals and offset peer pressures.

Recommendation

The prevention content areas on alcohol/substance abuse as part of the comprehensive school health program should be developed consistent with the National Institute on Drug Abuse school-based prevention research findings (Bell and Battjes 1985). That is, emphasis should be placed on the development of relevant curriculum and services to substantially improve our capacity to increase the Indian youth's coping skills, provide social inoculation/booster sessions, and enable social contracts.

Mass Media

School-based table 8.—Use of mass media to dessiminate critical alcohol/substance abuse prevention information—nationwide totals

Category	TV/ cable TV	Radio	Posters	Pamphlets
Alcohol/substance abuse	31	9	93	85
Drinking and driving	28	8	80	73
Teenage pregnancy	14	2	39	53
Teen smoking	12	2	44	50
Smokeless tobacco	7	1	29	50
Parenting	14	4	26	37
Others	12	3	24	68
Total	118	29	335	416

Findings

The majority of the schools utilized posters and pamphlets to disseminate information on alcohol/substance abuse to large segments of the student population and to a lesser degree used TV/cable TV and radio.

Discussion

Mass media approaches are important tools to complement school-based educational efforts. If well conceived and tested, media messages can strengthen public support for prevention and intervention to establish and reinforce messages, e.g., Just Say No to Drugs, to establish norms, and to provide coping skills. For the past several years, IHS has conducted national poster contests in grades 1 to 12 to sharpen the awareness of injury control among Indian youths. However, prevention messages can be drowned in a sea of commercials and promotional efforts for alcohol by celebrities, significantly undermining attempts to reduce alcohol/substance abuse, especially among Indian youths.

Recommendation

Increasing attention should be given to the "packaging" of mass media (videotapes, cassettes, posters, radio, national public service announcements) to supplement educational programs on alcohol/substance abuse. Community health educators, together with media experts, BIA, IHS, and school systems, should develop special work groups to develop these essential tools.

Employees and Volunteers Teaching Prevention Curriculum

School-based table 9.—Selected employees involved in teaching prevention curriculum

	Number	Percent
IHS employees		
Mental health	41	33
Health education	39	31
Nutrition	23	18
Social services	18	14
Community health nursing	5	4
Total	126	100
BIA employees		
Teachers/aides	146	73
Counselors	25	12
Others	13	7
Social services	12	6
Police	4	2
Total	200	100
Tribal employees		
Alcoholism counselors	124	42
Teachers/aides	70	24
Tribal officials (leaders and Council members)	40	14
Social services	29	10
Police	20	7
CHR workers	10	3
Total	293	100
School employees and volunteers		
Teachers/aides	1,228	80
Parents	141	9
Counselors	130	8
Others	41	3
Total	1,540	100

Findings

A total of 2,159 employees and volunteers representing IHS (126), BIA (200), tribal employees (293), and schools (1,540) were involved in teaching prevention/intervention subjects concerning alcohol/substance abuse.

Of the selected IHS employees who were survey respondents, the teaching of alcohol/substance abuse prevention activities was largely done by mental health (33 percent), health education (31 percent), followed by nutrition (18 percent) and social services (14 percent) employees.

The majority of the selected BIA employees involved in teaching prevention curriculum were represented by teachers and aides (73 percent).

Among the selected tribal employees who are involved in teaching alcohol/substance abuse prevention subject matters, the majority were alcoholism counselors (42 percent) followed by teachers and aides (24 percent).

For schools (other than tribal), i.e., public and private, most of the selected school employees and volunteers involved in the teaching of prevention were teachers and aides (80 percent).

Discussion

It is noteworthy to recognize that of the total number of employees and volunteers (2,159), a good cross-section of disciplines was involved in the teaching of prevention/intervention on alcohol/substance abuse.

The effectiveness of prevention and intervention services is dependent on the quality of the personnel who deliver this service. There needs to be a major focus on the establishment of a knowledge and skill base appropriate to each discipline and specialty in the alcohol/substance abuse prevention field, and the establishment of training programs and educational strategies that ensure the attainment of minimum educational requirements.

Recommendation

Because of the large number of employees involved in teaching prevention/intervention subject areas, priority consideration should be given by public and private entities to provide knowledge and adequate training to sharpen employees' skills and information about the current state of the art of alcohol/substance abuse prevention programs. Also teaching considerations should include whether teachers:

- feel comfortable with the subject matter
- have the sensitivity and background to deal effectively with Indian youths
- receive support to develop intervention approaches to deal with the serious problems of alcohol/substance abuse
- are provided opportunities for licensing and credentializing in alcohol/substance abuse prevention and intervention programs

School Prevention/Intervention Activities

School-based table 10.—School prevention/intervention activities—nationwide totals
(N=568)

Category	Number	Percent
Referral for counseling	127	22
Psychological enrichment activities (coping, self-esteem, decisionmaking, etc.)	101	18
Workshops/training	88	15
Peer group counseling	62	11
Self-help support	59	10
Students Against Drunk Driving (SADD)	36	7
Chemical People	31	5
Other outreach	16	3
Mothers Against Drunk Driving (MADD)	13	2
Other activities	35	7
Total	568	100

Findings

From a national perspective, prevention/intervention activities concerning alcohol/substance abuse were concentrated on referral for counseling (22 percent), psychological enrichment activities (18 percent), workshops/training (15 percent), and to a lesser degree peer group counseling (11 percent), and self-help (10 percent).

Discussion

Intervention involves two important steps: (l) identifying the problem and (2) taking action to minimize the severity of the identified problem. The first step may be accomplished through a formal or informal network with physicians, social workers, family, friends, coworkers, or law enforcement personnel. The second step of the intervention process, taking action, varies widely depending on the stage of the alcohol/substance abuse problem. Intervention can take on a range of activities: MADD, SADD, education targeted to pregnant women and children of alcoholics on the consequences of drinking, intensive counseling, etc.

Because alcohol/substance abuse has continued to have serious effects on the development of the Nation's youths, the Alcohol and Drug Abuse Education Programs

(ADAEP), U.S. Department of Education, developed a School Team Approach Program. This network of five regional training centers provides training and followup on-site support to teams of five to seven representatives of local schools and communities. The emphasis is on helping clusters of people to assess and solve problems themselves. They provide the development of a plan of action, implementation, and on-site support including technical assistance and field training.

Now in its 12th year, the program has trained over 4,500 teams throughout the country. These teams, in turn, have had a positive impact on students, parents, teachers, administrators, and community leaders. For further information contact:

National Alcohol and Drug Abuse
Education Program
Program Officer: Myles Doherty
U.S. Department of Education
Room 2040, FOB-6
400 Maryland Avenue, S.W.,
Washington, D.C. 20202-4101
(202) 732-4599

Recommendation

A clearinghouse for the dissemination and utilization of exemplary school-based prevention/intervention activities should be developed for schools and communities. The cataloging of current activities, program description, tapes, brochures, media, etc., available through sponsoring agencies and other sources can be of significant contribution to the field.

Curriculum Evaluation

School-based table 11.—Curriculum evaluation techniques utilized in schools—nationwide totals
(N=332)

Category	Number	Percent
Observation of student and followup	96	29
Pretest/posttest	52	16
Paper and pencil alcohol/substance abuse knowledge test	51	15
Staff curriculum evaluation	50	15
Student course evaluation	32	10
Self-rating scales to determine personal-social-attitudinal growth and developments	32	10
Others	19	6
Total	332	101[a]

[a]Total does not equal 100 percent due to rounding.

Findings

In assessing the evaluation techniques utilized in the schools surveyed, a greater percentage of the schools utilized observation of the student and followup (28 percent) followed by pre-post tests (16 percent), and paper and pencil alcohol/substance abuse knowledge tests and staff curriculum evaluation (15 percent each).

Discussion

Evaluation is the measurement of program performance—efficiency, effectiveness, responsiveness.

Overall, there is a lack of evaluation to systematically assess outcome measures of alcohol/substance abuse program activities throughout the schools. Evaluation is needed to facilitate decisions on whether support for specific curriculum is warranted and/or whether these efforts are wasteful or duplicative. It will provide necessary data to reward effective and efficient school-based programs.

Three broad accommodations are set forth to provide the foundation for effective prevention/intervention evaluation (Springer and Phillips 1986):

1. Early Planning of Evaluation Activities

   - A plan defines where a program is going. It articulates goals and objectives that guide the program and provide the criteria for success.
   - A plan defines how and when a program will achieve its objectives. It provides a reasoned link between the activities undertaken in the program and program objectives. It provides a basis for scheduling and allocation of resources.
   - A plan defines and limits the quality and quantity of information that is gathered while the program is in operation. Clearly defined indicators of program process and outcome, gathered on a continuing basis, provide the basic data for management-focused evaluation.
   - A plan provides a framework for management decisions that systematically use evaluation information to modify and improve program operation. Managers can determine if what they wanted to happen is happening, and if not, why.

2. Effectiveness-Oriented Goals and Objectives

   - *Specify target populations.* Goals and objectives should be formulated with attention to what has been learned in past evaluation. Past evaluations, for example, have demonstrated that most programs are inadequately targeted—little attention has been focused on populations most at risk and minority populations have been underserved. Providers should be made aware of these past shortcomings and encouraged to specify their target populations with respect to service needs.
   - *Consider available resources.* Goals and objectives should be formulated with explicit attention to what can be accomplished given the level of funding, personnel resources, and the duration of planned activities. Local program managers should be guided in an iterative process of identifying what they would like to accomplish, comparing these ideal goals and objectives to available resources, and restating goals and objectives in more realistic terms. The objective should be program objectives that are "doable" as well as "desirable." Past evaluations have indicated the prevalence and negative impact of poor implementation; moderate objectives—well-implemented—are preferable to ambitious failures.
   - *Articulate program process.* One of the major shortcomings of past evaluations has been lack of attention to program process—the specific strategies to be used in the program and the quality of their implementation. Effective program planning will specify the procedures to be used to produce the desired effect, and specify the reasons for choosing that particular approach. (For example, if "scare" approaches are to be used, why?) While findings are far from definitive, past evaluations can provide some guidance in designing program strategies to achieve specific objectives.

3. Plan Evaluation Activities

   - Planning for evaluation activities has several components specifying indicators of success for program objectives, specifying indicators of successful imple-

mentation (process), developing ongoing data collection activities, specifying the analysis design for the evaluation, and building in specific points for feedback of evaluation information to program management.

Recommendation

A review of the diversity of prevention programs represented in past evaluation carries important implications (Springer and Phillips 1986).

- First, no one approach, or model, of evaluation will be applicable to the range of programs in the field. Evaluations will have to be designed considering the specific characteristics of the program under investigation.
- Second, given the diversity of available approaches, effective evaluation will be particularly dependent on careful articulation of program goals, aims, and the strategies adopted to achieve those ends.
- Third, useful evaluations must include careful description and assessment of program strategies.

Outcome Indicators and Evaluation

School-based table 12.—Positive outcome indicators—nationwide totals
(N = 741)

Positive outcome indicators	Number	Percent
Increased self-esteem	104	14
Decreased disciplinary problems	64	9
Community education (workshops/training)	63	9
Increased attendance	57	8
Reduced alcohol-related incidences	55	7
Reduced substance abuse	54	7
Peer support groups formed	48	7
Increased participation in recreation programs	48	7
Increased participation in outreach program	47	6
Reduced truancy	44	6
Reduced health problems (increased health status)	39	5
Others	25	3
Decreased school dropout rate	33	4
Increased number of graduates	30	4
Increased test scores/grade average	30	4
Total	741	100

Findings

Based on their prevention program activities, the schools reported positive outcome indicators in the following major areas: increased self-esteem (14 percent), decreased disciplinary problems (9 percent), and increased attendance (8 percent).

Discussion

To a large extent the positive outcome indicators shown in table 12 do reflect the efforts of the school prevention/intervention activities (see table 10). The prevention/intervention activities and the positive outcome indicators are very much in concert with the key objectives of the school-based program activities. The key to achieving management of change to enhance prevention/intervention programs is to

develop measurable positive outcome indicators based on programs responsive to the needs of Indian youths.

Recommendation

In order to determine outcome measures relative to risk reduction, knowledge transfer, attitudinal changes, decisionmaking, etc., evaluation must become an integral program component to justify program support.

In order to determine program effectiveness, the following measurable criteria should be considered:

- Reduction of drug and alcohol use and abuse. Outcome measures could be in the form of self-reports by students.
- Reduction of associated disruptive behavior in classroom. Outcome measures could be in the form of reductions in referrals to the principal's office, suspensions and vandalism; a decrease in dropouts; or an increase in the perception by students that the school environment is safe.

Evaluation relative to process and outcome should provide the following data: (1) specific target group(s) to which the program(s) has been addressed (K-12); (2) knowledge level at start and end of program documenting the degree of change; (3) attitudinal changes documented before and after; and (4) other pertinent indicators to strengthen evaluation.

Community-Based Survey Results

Introduction

The community-based findings, discussion, and recommendations have been organized to provide public and private agencies a data base to justify and increase their program activities on alcohol/substance abuse targeted especially to Indian youths.

The community-based survey was limited to the tribal groups receiving IHS alcohol/substance abuse funded project grants—a total of 225 funded programs. The community-based questionnaires were sent to all 225 funded grants through the Area Office, Alcoholism and Substance Abuse Program Coordinator; the grants were funded widely throughout all of the 12 area offices. (See community-based table 1).

Area Response to the Survey

Community-based table 1.—Respondents by IHS area—nationwide total
(N=160)

Area	Area IHS-funded programs	Returned	
		Number	Percent
Aberdeen	22	4	18
Alaska	13	12[a]	92
Albuquerque	18	18[b]	100
Bemidji	27	18	67
Billings	11	9	82
California	27	25	93
Nashville	16	9	56
Navajo	1	1[c]	100
Oklahoma	18	16[d]	89
Phoenix	37	24	65
Portland	34	23	68
Tucson	1	1	100
Total	225	160	71

[a]For the Alaska Area, 15 non-IHS funded programs responded.
[b]For the Albuquerque Area, 4 non-IHS funded programs responded.
[c]For the Navajo Area, ll programs responded under the single grant umbrella.
[d]For the Oklahoma Area, l non-IHS funded program responded.

Findings

Of the 160 returned questionnaires, a 100 percent response was achieved by Albuquerque, Tucson, and Navajo, followed by California (93 percent), Alaska (92 percent), and Billings (82 percent).

Discussion

Given the major task of contacting numerous tribes within their jurisdiction and, in some instances, those who reside in remote reservations, the 71 percent total response achieved by the IHS coordinators is considered favorable.

Recommendation

Based on the experience achieved by the 12 Area Alcoholism/Substance Abuse Coordinators, IHS, in conducting this survey, a 95 to 100 percent response should be achieved for any future IHS-school/community-based prevention survey.

Target Groups

Community-based table 2.—Number of prevention programs by target groups—nationwide total
(N=999)

Target groups	Number	Percent
Adolescents	137	14
Parents	116	12
Women	122	12
Men	121	12
Single parents	103	10
Preadolescents	99	10
Tribal employees	79	8
Pregnant women	77	8
Age over 65	70	7
Government employees	42	4
Others	33	3
Total	999	100

Findings

With respect to prevention programs targeted to specific groups, the percentages were generally evenly distributed among adolescents (14 percent), parents/women/men (12 percent each), single parents/preadolescents (10 percent each), and less among tribal employees/pregnant women (8 percent each), and age over 65 (7 percent).

Discussion

The community focus on target groups seems to encompass the family. The following risk factors clearly reinforce the need to develop preventive intervention activities aimed at the high-risk family members—adolescents, parents, and children:

- Indian community members have a disproportionately low income when compared with the U.S. income average; thus, the consequences of alcohol/substance abuse among family members are severe, especially for Indian children.
- The NIBADA Youth Council National representatives reported that family problems were the major contributing factor in Indian youth dysfunction (Mackey 1987).

- A review of 39 studies comparing the incidence of alcoholism in families of alcoholics found that alcoholics were six times more likely than the general population to have one or more parents who were alcoholics (Whitfield 1981).
- It has been estimated that 80 percent of all adolescent suicides may be children of alcoholics (Whitfield 1981).
- The most consistent finding is that children of alcoholics are at serious risk of becoming alcoholics (Goodwin 1973).

Recommendation

Youth alcohol and substance abuse services should give priority to the following high-risk target groups:

- children of alcoholics and substance abusers
- children at risk for abuse and neglect or who have been abused and neglected
- teens at risk of pregnancy (teens in single parent households, teens who have had pregnancies, teens who have had sexually transmitted diseases (STD)
- youths likely to drop out of school because of poor grades, being expelled, etc.
- youths charged with a crime
- youths who have attempted suicide, and their friends and siblings

Areas for Program Concern

Community-based table 3.—Major areas of concern for program planning and development—nationwide
(N = 1,580)

Major areas of concern	Number	Percent
Alcohol/substance abuse related morbidity and mortality (cirrhosis, acute alcoholism, DTs, etc.)	240	15
Alcohol/substance abuse related accidents: (falls, drowning, fire, vehicle with personal injury/property damage)	228	15
Alcohol/substance abuse related family violence and child abuse/neglect	212	14
Fetal alcohol effect and syndrome	201	13
Alcohol/substance abuse related arrests	116	7
Smokeless tobacco and smoking	100	6
Alcohol/substance abuse related pregnancies	84	5
Inhalants	83	5
Suicides	80	5
Cocaine use	64	4
Homicides	51	3
Crack	43	3
LSD	40	3
Others	38	2
Total	1,580	100

Findings

Of the 1,580 responses, program planning and development were based on the following evenly distributed areas of concern: alcohol/substance abuse related morbidity and mortality (15 percent), alcohol/substance abuse related accidents (15 percent), alcohol/substance abuse related family violence and child abuse/neglect (14 percent), and fetal alcohol effect and syndrome (13 percent).

Discussion

The major concern by community groups involving alcoholism morbidity and mortality and alcohol-related accidents is a manifestation of the disproportionately high

alcoholism death rates among Indians and the deaths by accident among the 15-to-24 age group of Indian and Alaska Natives. (See appendix C charts 4.23 and 4.2.)

Most studies have demonstrated that alcoholic behavior in parents is causally linked to disruption in their children's lives, which prompts drinking and drug taking as a response to the trauma (Mail and McDonald, 1980). Mason (1985) and McBride and Page (1980) found that Indian drug users were more likely to have unpleasant home situations, deteriorating relationships with their parents, and alienation from the traditional ways of life.

In Alaska, the proportion of alcohol-related deaths is very high. In one Alaskan study (Bernier 1987) 72 percent of all suicides were alcohol related; an estimated 84 percent of homicides were alcohol related; and 70 percent of all deaths of Alaskan 15 to 34 year olds were alcohol related.

Alcohol is involved in approximately one-fourth to one-half of marital violence cases, one-third of child molestation incidents, and 13 percent of child abuse cases (Roizen 1982; Hamilton and Collins 1981). Some of these incidents end in death and many are associated with severe physical and mental trauma.

Alcohol is clearly associated with disrupted family functioning, but the marital and family problems that precede the alcoholism may occur solely as a result of the alcoholic's drinking and behavior changes, or may be part of a complex interaction between preexisting weaknesses of the family or of individuals in the family and the drinking of one family member.

Recommendation

Because each community is unique, prevention/intervention program activities should fit the priority needs and concerns of the specific target groups.

Networking

Community-based table 4.—Selected employees networking with community-based alcohol/substance abuse prevention programs

	Number	Percent
IHS employees		
Social services	142	27
Community health nursing	132	25
Mental health	99	19
Health education	63	12
Nutrition	37	7
Alcoholism workers (IHS, not tribal)	28	5
Administration	21	4
Doctors	8	1
Total	530	100
BIA employees		
Teachers/aides	92	33
Administrative	64	23
Social services	38	14
Police	34	12
Counselors	30	11
School	19	7
Total	277	100
Tribal employees		
Community health representative (CHR)	951	50
Alcoholism	699	37
Social services	79	4
School teachers	74	4
School counselors	37	2
Others	52	3
Community health nurses	17	<1
Total	1,909	100

Findings

A total of 2,716 employees representing tribal groups (1,909), IHS (530) and BIA (277) networked with the community-based alcohol/substance abuse prevention programs. Both school-based table 9 and community-based table 4 indicate an overall

positive response from school and community agencies for prevention/intervention program activities.

Among the IHS employees who participated in community-based sponsored alcohol/substance abuse program activities, social services (27 percent) and community health nursing (25 percent) had the highest involvement, followed by mental health (19 percent) and health education (12 percent).

Among the BIA employees who participated in community-based sponsored alcohol/substance abuse program activities (277), the greatest percentage represented teachers/aides (33 percent) followed by administrative personnel (23 percent), social services (14 percent), police (12 percent), and counselors (11 percent).

Among the tribal employees networking with community-based programs, the greatest percentage came from CHR (50 percent), and alcoholism (37 percent), with only minimal representation from social services, school teachers, and counselors.

Discussion

As health promotion/disease prevention activities take on renewed interest based on the thrust provided by the Omnibus Drug Bill, the need for tripartite IHS, BIA, and tribal cooperation, a centerpiece for program development and implementation, becomes clear. The utilization of the Tribal Action Plan to foster and enhance tribal ownership of programs and combat alcohol/substance abuse at the local level must be supported.

Recommendations

The tripartite working relationship through the Tribal Action Plan should be monitored carefully by all concerned to avoid the fragmentation of services. Every tribal Action Plan should include a section titled "Youth Alcohol and Substance Abuse Tribal Action Plan."

Alcohol/Substance Abuse Programs

Community-based table 5.—Community-based[a] alcohol/substance abuse programs, September 1985-June 1986

Programs	Participants	Community	Sessions	Session frequency			
				Weekly	Biweekly	Monthly	Other
Topical (alcohol/substance abuse related activities)	18,161	159	2,592	65	14	26	48
Here's Looking at You	3,363	16	261	7	2	1	6
BABES	3,251	25	349	15	3	2	0
Project Charlie	2,436	13	631	8	1	2	3
Children of Alcoholics	1,895	37	533	16	5	6	9
Parent Effectiveness Training	1,615	38	595	13	10	5	9
Trails	443	3	124	2	0	1	0
Chemical People	440	12	88	1	5	2	4
Circle of Life	342	9	48	0	1	1	4
Total	31,946	312	5,221	127	41	46	83

[a]Includes communities in which there are concentrations of American Indian and Alaska Native people both on and off reservations and in urban areas.

Findings

A total of 312 communities numbering 31,946 participants were involved in community-based alcohol/substance abuse prevention and intervention programs. A total of 5,221 sessions were conducted, usually on a weekly format basis. In addition to topical presentations, the community-based programs cited increasing interest in special projects aimed at Indian youths, e.g., Here's Looking at You, BABES, Project Charlie, Children of Alcoholics, and Parent Effectiveness Training.

Discussion

While there is limited information on alcohol/substance abuse prevention education programs in American Indian/Alaska Native communities, one study by Moss (1979) of 20 Indian communities points out that tribal leaders learned more about alcohol abuse prevention by attending formal meetings and workshops. Data from this study indicated that receipt of information in face-to-face situations was very effective in changing attitudes of community leaders. Moss's study suggests that it might be important for community-based prevention programs to use direct methods such as counseling and group meetings supplemented with the media to instruct and inform Indian communities, since these communities are generally poorly informed about factual data on alcohol/substance abuse prevention.

Recommendation

Community-based prevention and intervention programs should build on the positive inroads made through the collaborative efforts of the tribal groups, schools, and interested public/private agencies. It will demand community level intervention strategy that includes economic, attitudinal, and educational approaches and more emphasis on tribal ownership of prevention/intervention programs tailored especially to the needs of Indian youths.

Program Content

Community-based table 6.—Selected program content related to alcohol/substance abuse—nationwide totals
(N=797)

Selected program content	Number	Percent
Alcohol/substance abuse education	123	15
Building self-esteem (concept) and coping skills	110	14
Decisionmaking skills	100	13
Awareness of community resources	99	12
Developing mutual-help and self-help suppport groups	86	11
Creating health promotion/disease prevention activities	91	11
Family bonding and enrichment	69	9
Effective parenting	61	8
Single parenting activities	46	6
Others	12	1
Total	797	100

Findings

Content areas utilized in the community-based prevention programs appear to be fairly evenly distributed among the following: alcohol/substance abuse education (15 percent), building self-esteem (concept) and coping skills (14 percent), decisionmaking skills (13 percent), awareness of community resources (12 percent), creating health promotion/disease prevention activities (11 percent), and developing mutual-help and self-help support groups (11 percent).

Discussion

Operationally, the development of relevant community-based prevention programs should be based on the leadership input from organizations such as the Tribal Coordinating Council and Village Council working jointly with responsive key agencies. Indian families, elders, teachers, and youth workers are rich sources of assessment information (Schinke et al. 1985), and community-based prevention programs should build on strengths of Indian families together with other youth-directed prevention strategies. Assessment activities can enhance the development of program content responsive to the needs of Indian people at the local level.

Recommendation

While there is a continuing need to stress the problems of youth alcohol/substance abuse, fetal alcohol syndrome cause and effect, child abuse problems, etc., there is a need to balance community-based prevention programs with topics such as promoting a healthy lifestyle as contrasted to a destructive lifestyle, promoting self-esteem, family bonding, etc.

Prevention/intervention services should be provided by community-based health agencies complementing age-specific prevention programs in Head Start to 12th grade.

Employees and Volunteers Teaching Prevention Curriculum

Community-based table 7.—Selected employees and other participants involved with community groups in the teaching of prevention curriculum

	Number	Percent
IHS employees		
Mental health	71	34
Social services	51	25
Health education	35	17
Nutrition	29	14
Community health nursing	17	8
Counselors	1	<1
Others	3	1
Total	207	100
BIA employees		
Teachers/aides	37	34
Police	33	30
Social services	21	19
Counselors	12	11
School	7	6
Total	110	100
Tribal employees		
Alcoholism	200	49
School teachers	72	17
Social services	68	16
School counselors	32	8
CHR	27	7
Others	12	3
Total	411	100
School employees		
Teachers/aides	154	72
Counselors	37	17
Administration	13	6
Others	10	5
Total	214	100
Other participants		
Parents	150	87
Church workers	19	11
Others	4	2
Total	173	100

Findings

A total of 1,115 community-based agency employees (IHS, 207; BIA, 110; tribal employees, 411; schools, 214; others, 173) representing a good cross-section of disciplines were involved with community groups in teaching prevention and intervention program activities.

For IHS employees involved in the teaching of prevention curriculum, the highest percentages were among mental health (34 percent), followed by social services (25 percent), health education (17 percent), nutrition (14 percent), and community health nursing (8 percent).

Among BIA employees, the groups having the highest percentage involvement in teaching the prevention curriculum were teachers/aides (34 percent) and police (30 percent) followed by social services (19 percent) and counselors (11 percent).

For tribal employees, alcoholism (49 percent), and school teachers (18 percent) had the highest percentage of participants involved in the teaching of prevention curriculum followed by social services (17 percent) and school counselors (8 percent).

For the schools, the overwhelming majority of participants represented the teachers/aides (72 percent) followed by counselors (17 percent).

For other participants, the overwhelming majority represented the parents (87 percent) followed by church workers (11 percent).

Discussion

There appears to be considerable diversity in the composition and utilization of personnel in the community-based prevention and intervention efforts. Because of this multidisciplinary involvement, it is important that each professional or specialty group, including the volunteers, systematically defines the relevant alcohol/substance abuse knowledge and skills required by members of its specialty and promotes the use of training programs and educational strategies to ensure the quality and integrity of its prevention programs.

Credentializing and licensing are effective mechanisms to ensure that education and training requirements are uniformly met by all members in this profession or discipline. The establishment of these requirements was incorporated into the recently updated *Manual Issuance of the Alcoholism/Substance Abuse Activities* (IHS 1987). For those professions with long-established licensing and credentializing mechanisms, efforts need to be directed to the integration of alcohol/substance abuse knowledge base and skill requirements into their comprehensive educational standards.

Recommendation

In order to ensure a high level of competency for alcohol/substance abuse prevention personnel, public and private agencies should establish appropriate training systems and licensing/certifying mechanisms.

Mass Media

Community-based table 8.—Utilization of selected mass media and major subjects covered

Mass media	Alcohol/ substance abuse	Drinking/ driving	Teenage pregnancy	Teen smoking	Smokeless tobacco	Parenting	Other
TV/cable TV	42	34	20	18	13	17	7
Radio	50	42	21	17	11	17	13
Posters	98	81	57	46	38	41	26
Pamphlets	104	94	76	59	39	63	32
Total	294	251	174	140	101	138	78

Findings

In contrast to the school population (school-based table 8), there is greater utilization of TV, cable TV, and radio by community groups in seeking information on the major topics above. However, there is similarity with the school-based programs on the greater utilization of posters and pamphlets for the dissemination of factual information regarding the major topics mentioned.

Discussion

Moss (1979) found that the majority of Indian people in his study gained their information on alcohol and alcoholism from the media (radio, newspapers, magazines). It appeared that most of the community residents in the sample were not interested in formal methods of alcohol education. Informal and indirect methods of educating adults, such as radio broadcasts or articles on alcohol in newspapers and magazines, were more effective than formal educational methods.

The use of videotaped alcoholism education has had a profound impact among American Indians/Alaska Natives. "The Honour of All" (a true story) is a powerful 56-minute video educational document portrayed by people who endured the devastation of alcoholism. It is the dramatization of how they became sober after a painfully slow 14 years of individual and community recovery against alcohol. The film has received universal acclaim, and members from the Alkali Lake Indian Band of British Columbia have become very much in demand throughout the United States for conducting training workshops based on their successful sobriety outcomes (100 percent alcoholic to 95 percent sober in 14 years).

Also, the use of community access cable television targeted especially to remote Indian reservations and villages presents exciting challenges and opportunities to communities at risk regarding alcohol/substance abuse.

Recommendations

In order to extend community-based outreach capabilities, especially to the vast majority of the Indian population who wish to remain anonymous, who do not want to participate face to face, and lack transportation, and taking into account the need to reach large audiences, the mass media approaches should be expanded and supported. A Center for Media Prevention and Intervention should be developed to produce films, video documentaries, and brochures and pamphlets for wide dissemination and utilization. The IHS health educators should play an integral role in developing such a center.

Intervention Activities

Community-based table 9.—Selected intervention activities, September 1985—June 1986 (N=689)

Selected intervention activities	Number	Percent
Alcohol/substance abuse counseling/ referral	108	16
Workshops/training	96	14
Self-help/support groups	93	13
Driver education	92	13
Employee counseling services	60	9
Drop-in program	52	8
Employee health promotion	51	7
Summer camps	46	7
Students Against Drunk Driving (SADD)	39	6
Mothers Against Drunk Driving (MADD)	30	4
Chemical People	22	3
Total	689	100

Findings

Nationally, the intervention activities receiving the highest percentages were alcohol/substance abuse counseling/referral (16 percent), workshops/training (14 percent), self-help and support groups (13 percent), and driver education (13 percent).

Discussion

Community-based intervention activities hold tremendous opportunities and challenges to encourage healthy lifestyles among the Indian people. More and more people are interested in and concerned about personal wellness and directing attention and effort toward their own physical fitness and lifestyle. Prevention of illness and promotion of health and wellness have become a highly supported concept among the Indian people, especially at the local tribal level.

Past claims that teaching coping skills such as self-monitoring, changing negative cognitions, assertion, anxiety reduction, and time management are alien to most American Indians and cannot be learned by them have crumbled in the face of mounting evidence to the contrary (Manson 1985). Social skills and assertiveness training can be conducted with lasting positive effects among American Indians.

The Zuni Diabetes Project on exercise and education designed to prevent type II diabetes resulted in overweight Zunis slimming down; diabetic tribe members bringing their blood sugar levels down enough to go off medication; and the Zuni passion for running becoming rekindled (Crzelka 1986).

Social support systems can play significant roles in the prevention/intervention area. Social support consists of three components: direct (family, extended family, friends, coworkers), indirect (group participation and interaction), and community (Andrews et al. 1978). Social support has been found to provide a significant "buffering effect" at times of high life stress (Nuckolls et al. 1972; Cassel 1974; Kaplan et al. 1977).

A study of two Alaska Native villages found that villages with strong, organized, and locally developed community institutions worked best to support the individual abuser seeking treatment and to provide continued followup and after-care treatment (Shinkwin 1982).

Recommendation

In general, intervention in alcohol and substance abuse should focus on the targeted high risk group(s) rather than the individual. Intervention approaches should embrace the efficacy of coping skills training, social support systems, and community involvement, particularly in providing followup care, including "booster" sessions on critical prevention and intervention activities.

Outcome Indicators and Evaluation

Community-based table 10.—Program evaluation instruments/techniques utilized by communities—nationwide totals
(N=415)

Category	Number	Percent
Interviews and conversations	84	20
Questionnaires	80	19
Active participation and participant observer	60	15
Pre/post tests	57	14
Observation schedules and interaction analyses	39	9
Rating scales and checklists	28	7
Historical, biographic, and anecdotal	24	6
Attitudinal scales	22	5
Opinionnaires	21	5
Total	415	100

Findings

The program evaluation instruments/techniques utilized prominently among community groups were interviews and conversations (20 percent), questionnaires (19 percent), active participation and participant observer (15 percent), and pre/post tests (14 percent).

Discussion

The survey revealed that numerous school/community-based prevention and intervention programs have received favorable comments; however, unevaluated programs can give an illusion of achieving positive outcomes when, in fact, the program is benign or even harmful (Chavis et al. 1983; Reinherz 1981).

Based on evaluation results, community-based prevention programs can determine whether they are, in fact, helping Indian youths. Indeed, due to the ever-increasing competition for financial resources, it may well become the determining factor of whether an agency program is sustained or dropped for the lack of data to justify support for the program.

Recommendation

There is a great need for community-based agencies to develop evaluation tools for ensuring that local program efforts are planned and managed with clear objectives and that those objectives are realistic and achievable.

Positive Outcome Indicators

Community-based table 11.—Positive outcome indicators—nationwide totals (N=515)

Category	Number	Percent
Community education/workshops/training	104	20
Increased participation in outreach program	88	17
Reduced alcohol/substance abuse related:		
Arrest	37	7
Family violence	30	6
Accidents	29	6
Child abuse/neglect	26	5
Suicide	23	5
Increased reported incidence of:		
Wife abuse	34	7
Child abuse	32	6
Reduced fetal alcohol syndrome	19	4
Reduced fetal alcohol effects	18	4
Reduced alcohol/substance abuse related:		
Homicide	17	2
Cirrhosis	12	2
Reduced alcohol/substance abuse related:		
Teenage pregnancies	9	2
Trauma	9	2
Acute episodes of alcohol/substance abuse hospital/clinic admission	7	1
Reduced alcohol/substance abuse	11	2
Increased reported incidence of fetal alcohol syndrome	6	1
Increased reported incidence of other problems such as vandalism, assaults, etc.	4	1
Total	515	100

Findings

Community education/workshops/training (20 percent) and increased participation in outreach programs (17 percent) achieved the highest percentages on positive outcome indicators as the result of intervention program activities.

Only minimal positive outcomes were indicated in areas such as reduced alcohol/substance abuse in accidents, teenage pregnancies, and homicide.

Discussion

Outcome evaluation focuses on goal achievement and problem resolution as a result of activity or action.

Examples of short-term outcomes are:

- Reduced alcohol intake
- Increased knowledge of risk factors
- Improved lifestyle patterns
- Increased requests for additional sessions
- Increase in personal exercise behavior

Examples of long-term outcomes are:

- Improved job performance
- Lower health costs
- Reduced employee turnover
- Improved job satisfaction
- Reduced rates of sick leave/absence
- Lower morbidity/mortality

The positive outcome indicators regarding community education/workshops/training plus the increased participation in the outreach program provide the incentive for community-based programs to increase their capacity to develop and utilize outcome measures as an integral component on their ongoing program activity.

Recommendation

The tripartite (IHS, BIA, tribes) should develop a task force to develop and disseminate guidelines and/or standards for evaluation and outcome measures of local programs. The tripartite should make technical assistance and evaluation consulting services available to local providers.

Section III: Summary

Summary

The findings of this survey clearly indicate that positive inroads are being made within the schools and communities on alcoholism and substance abuse prevention/ intervention especially aimed at Indian youths. There are in place an array of school/ community prevention and intervention activities that require careful analyses so we can build on the strengths of these ongoing programs and avoid wasteful duplication.

Of paramount importance is the urgent need for *early intervention* to combat alcohol and substance abuse among Indian youths. The cornerstone for these efforts must involve the strategy of program ownership, collaboration with appropriate agencies, and implementation by the tribes to enhance the concept of self-determination. Major findings by researchers (Mason, Beauvais, and Oetting) substantiate the urgent need for early intervention to reduce serious alcohol and substance abuse consequences.

The family may prove to be the bulwark to prevent and/or reduce the incidence of alcohol and substance abuse among Indian youths. Adolescents need strong families if they are to grow up and remain rooted in a strong sense of self-esteem, identity, and values. Weak families produce uprooted individuals susceptible to "peer clusters" prone to alcohol and substance abuse.

Current knowledge and projections for 1995 indicate that prevention/intervention strategies will be as important as treatment strategies in reducing the onset of new cases involving alcohol and substance abuse. The heterogeneity of the Indian tribes requires that diverse prevention/intervention approaches be available on both a short-term and long-term basis; however, the continuation of program support must be based on positive outcome measures to ensure the maximization of scarce resources.

The powerful film, "The Honour of All," a documentary film of the Alkali Lake Indian achievement, has made a tremendous impact throughout the American Indian/Alaska Native communities. The use of mass media presents exciting challenges and opportunities to: (1) extend outreach capabilities by reaching people who wish to remain anonymous or who would not want to participate face to face; (2) provide opportunities to develop intervention approaches on how to cope from those who have overcome the problems of alcohol and substance abuse; and (3) facilitate health promotion and disease prevention activities tailored to specific groups including those in remote reservations and villages.

The findings of this survey offer insights that have utility beyond American Indian and Alaska Native communities. The successes in school/community-based interventions in these communities should have replicability in other environments, especially

minority and disadvantaged populations. The commitment to these activities and the various technologies utilized could be exported readily to these settings.

There is a critical need to provide ongoing research and evaluation to determine whether prevention/intervention will work prior to replication. In order to determine the effectiveness of the school/community-based prevention/intervention activities some meaningful questions which might be raised include the following:

- Based on the current school/community-based prevention/intervention activities and with the expectation of improved programming, can the YPLL be lowered in 1995, especially for the Aberdeen, Billings, Phoenix, and Tucson areas?
- Will the school/community-based prevention/intervention activities enhance the tripartite collaboration (IHS/BIA/tribes)? If so, what are the tangible accomplishments?
- Will the trends for the "Lifetime Prevalence Rates for Nine Drugs for Indians, 7-12 Grades", be higher or lower, during the years 1989, 1991, and 1993 when compared with 1973?
- What will be the "Comparison of Indian and Non-Indian Adolescents Having Ever Tried Drugs" in 1990?
- What will be the "Percentages of Indian Adolescents in Each Drug Use Type" for 1989 and 1991?
- Will the "Age of First Use" have increased or decreased in 1990?

These questions are compelling and require continuing support for a course of action that would strengthen school/community-based prevention/intervention efforts tailored to Indian youths. For the Indian Health Service, the framework for action targeted to the Indian youth on alcoholism and substance abuse prevention/intervention is already underway. If the commitment is made at every level, there is convincing indication that the IHS Alcoholism/Substance Abuse Objectives for 1995 will be attained.

Finally . . . "In the long run, prevention is far more effective than our capacity to repair and it is short-sightedness bordering on blindness to build up on the clinical endeavor at the expense of the preventive one" (Sarason 1977).

References

Andrews, G.; Tennent, D.; and Hewson, V. Life event stress, social support, coping style and risk of psychological impairment. *Journal of Nervous and Mental Disease* 166:307-316, 1978.

Beauvais, F., and Oetting, E.R. High rate of drug use among Native American youth. *NIDA Notes* (National Institute on Drug Abuse) 2(2):14, 1987.

Beauvais, F.; Oetting, E.R.; and Edwards, R.W. *The Epidemiology of Alcohol Use and Abuse Among U.S. Ethnic Minority Groups.* Fort Collins: Colorado State University, 1985*a*.

Beauvais, F.; Oetting, E.R.; and Edwards, R.W. Trends in drug use in Indian adolescents living on reservations: 1975-1983. *American Journal of Drug and Alcohol Abuse* 11(3-4):209-229, 1985.

Bell, C., and Battjes, R. *Prevention Research: Deterring Drug Abuse Among Children and Adolescents.* NIDA Research Monograph No. 63, DHHS Pub. No. (ADM) 85-1334. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., 1985.

Bernier, J.A. *Youth Alcohol and Drug Abuse Tribal Action Plan.* Sitka, AL: Southeast Alaska Regional Health Corporation, 1987.

Braucht, G.N.; Follingstad, D.; Brakarsh, D.; and Berry, K.L. Drug education: A review of goals, approaches, and effectiveness, and a paradigm for evaluation. *Quarterly Journal of Studies on Alcohol* 34:1279-1292, 1973.

Bruhn, J.; Philips, B.; and Gouin, H. The effects of drug education courses on attitudinal change in adult participants. *International Journal of the Addictions* 10:65-96, 1975.

Cassel, J. Psychological processes and stress: Theoretical formulations. *International Journal of Health Services* 4:471-482, 1974.

Chavis, D.M.; Stucky, P.E.; and Wandersman, A. Returning basic research to the community: A relationship between scientist and citizen. *American Psychologist* 38:424-434, 1983.

Crzelka, C. Fitness program restores Zuni tradition of running. *Health Link* II(1), March 1986.

Davis, S.M.; Hunt, K.; and Kitzes, J.A. *An Emerging Approach to Improving the Health of Indian Adolescents and Youth: A Public Youth Demonstration Project Initially Implemented for Two Pueblos and a Navajo Community.* Albuquerque, NM: University of New Mexico, School of Medicine, 1985.

de la Garza, V. "Effective Practices in Indian Education: Substance Abuse Prevention." Research and Development Program for Indian Education, Northwest Regional Educational Laboratory, Portland, OR, June 1987.

Goodwin, D.W. Alcohol in suicide and homicide. *Quarterly Journal of Studies on Alcohol* 34:144-156, 1973.

Hamilton, C.J., and Collins, J.D., Jr. The role of alcohol in wife beating and child abuse: A review of the literature. In: Collins, J.J., Jr., ed. *Drinking and Crime: Perspectives on the Relationships Between Alcohol Consumption and Criminal Behavior.* New York: Guilford Press, 1981.

Indian Health Service. *Manual Issuance of the Alcoholism/Substance Abuse Activities.* Washington, DC: the Service, September 1987.

Jones, C., and Bell, C. Why, when and what can we do about it. *Children Today*, May-June 1986.

Kaplan, B., et al. Social support and health. *Medical Care* 15:47-58, 1977.

Kim, S. Who do we know whether a primary prevention program on drug abuse works or does not work? *The International Journal of the Addictions* 16:359-365, 1981.

Kinder, B.; Pape, N.; and Walfish, S. Drug and alcohol education programs: A review of outcome studies. *International Journal of the Addictions* 15(7):1035-1054, 1980.

La Fromboise, T.D. *Assertion Training With American Indians: Cultural/Behavioral Issues for Trainers.* Las Cruces: New Mexico State University, Educational Resources Information Center Clearinghouse on Rural Education and Small Schools, 1982.

La Fromboise, T.D., and Rowe, W. Skills training for bicultural competence: Rationale and application. *Journal of Counseling Psychology* 30:589-595, 1983.

Mackey, J. *Final Report, Youth Council Meeting, May 5-8, 1987.* Portland, OR: National Indian Board on Alcohol and Drug Abuse, 1987.

Mail, P.D. "The Prevalence of Problem Drinking in the San Carlos Apache." Unpublished master's thesis, Yale University, Department of Epidemiology and Public Health, 1967.

Mail, P.D., and McDonald, D. *Tulapai to Tokay.* New Haven: HRAF Press, 1980.

Mail, P.D., and Palmer, I. *The Report of a National Survey in American Indian Communities*, Indian Health Service. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., October 1985.

Manson, S.M., et al. "Physical Illness, Depression, and Older American Indians: A Preventive Intervention Trial." Paper presented at Illness Prevention and Health Promotion in North American Medical Anthropology in Action, American Anthropological Association Meeting, Washington, DC, December 6, 1985.

Mason, V. "Relationship of Drug Use and Self Concept Among American Indian Youth." Ph.D. dissertation, University of New Mexico, 1985.

May, P.A. Alcohol and drug misuse prevention programs for American Indians: Needs and opportunitites. *Journal of Studies on Alcohol* 47(3), 1986.

McBride, D., and Page, J. Adolescent Indian substance abuse. *Youth and Society* 11(4):475-492, 1980.

Miller, J.D., et al. *National Survey on Drug Abuse: Main Findings 1982*, National Institute on Drug Abuse. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., 1983.

Moskowitz, J.M.; Schaps, E.; Malvin, J.H.; and Schaeffer, G.A. The effects of drug education at follow-up. *Journal of Alcohol and Drug Education* 30:45-49, 1984.

Moss, F.E. *Drinking Attitudes and Practices in Twenty Indian Communities.* Salt Lake City: University of Utah, Western Regional Alcoholism Training Center, 1979.

Moss, F.E., and Janzen, F.V. *Types of Drinkers in Indian Communities.* Salt Lake City: University of Utah, Western Region Alcoholism Training Center, 1980.

Nuckolls et al. Psychosocial assets, life crisis and the prognosis of pregnancy. *American Journal of Epidemiology* 95:341-441, 1972.

Oetting, E.R., and Beauvais, F. *Drug Use Among Native American Youth: Summary of Findings (1975-1981).* Fort Collins: Colorado State University, Department of Western Behavioral Studies, 1982.

Oetting, E.R.; Beauvais, F.; Edwards, R.; Velardy, T.; and Goldstein, G. *Drug Use Among Native American Youth: Summary of Findings (1975-1981).* Fort Collins: Colorado State University, Western Behavioral Studies, 1982.

Olsen, L.K., and Baffi, C.R. A descriptive analysis of drug and alcohol use among selected Native American high school students. *Journal of Drug Education* 12(2):97-101, 1982.

Red Horse, T. American Indian family: Research perspectives. In: Hoffman, F., ed. *The American Indian Family: Strengths and Stresses. Proceedings of the Conference on Research Issues.* Isleta, NM: American Indian Social Research and Development Associates, 1980. pp. 1-11.

Reinherz, H. Evaluating programs of primary prevention: How can we know if they make a difference? In: Nobel, M., ed. *Primary Prevention in Mental Health and Social Work.* New York: Council on Social Work Education, 1981. pp. 54-63.

Richmond, J.B. *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*, U.S. Public Health Service. DHEW (PHS) Pub. No. 79-55071. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., 1979.

Richmond, J.B. *Promoting Health/Preventing Diseases: Objectives for the Nation,* Office of the Surgeon General. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., Fall 1980.

Roizen, J. Estimating alcohol involvement in serious events. In: National Institute on Alcohol Abuse and Alcoholism. *Alcohol and Health.* Monograph No. 1. *Alcohol Consumption and Related Problems.* Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., 1982.

Sarason, S.B. *Work, Aging, and Society: Profession and the One Life One Career Imperative.* New York: Free Press, 1977.

Schaps, E.; DiBartolo, R.; Moskowitz, J.; Palley, C.S.; and Churgin, S. A review of 127 drug abuse prevention program evaluations. *Journal of Drug Issues*, Winter 1981. pp. 17-43.

Schinke, S.P., et al. Strategies for preventing substance abuse with American Indian youth. *White Cloud Journal* 3(4), 1985.

Schinke, S.P., and Gilchrist, L.D. *Life Skills Counseling With Adolescents.* Baltimore: University Park Press, 1984.

Skinkwin, A., and Pete, M. Alaska villagers' views on problem drinking: "Those who forget." *Human Organization* 41(4):315-322, 1982.

Southeast Alaska Regional Health Corporation. *Youth Alcohol and Drug Abuse Tribal Action Plan.* Sitka, AL: the Corporation, April 1987.

Springer, J.F., and Phillips, J.L. *Evaluating Drug Abuse Prevention: Current Directions and Implications for ADP.* Sacramento, CA: EMT Associates, Inc., 1986.

Swanson, D.M.; Braturde, A.D.; and Brown, E.M. Alcohol abuse in a population of Indian children. *Diseases of the Nervous System* 31:835-842, 1971.

Whitfield, C. Children of alcoholics: Treatment issues. In: National Institute on Alcohol Abuse and Alcoholism. *Services for Children of Alcoholics*, Walker, W.W., and White, B.J., eds. NIAAA Research Monograph No. 4, DHHS Pub. No. (ADM) 81-1007. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., 1981.

Whittaker, J.O. Alcohol and the Standing Rock Sioux Tribe. I: The pattern of drinking. *Quarterly Journal of Studies on Alcohol* 23:468-479, 1962.

Appendix A

IHS Alcoholism/Substance Abuse Objectives for 1995

Alcohol/Substance Abuse

By 1995, 80 percent of Indian high school seniors should comprehend that frequent cigarette smoking, smokeless tobacco use, marijuana use, alcohol or other drug use, intoxication, or sniffing pose risks to their health.

By 1995, the proportion of adolescents 12 to 17 years of age who abstain from using alcohol or other drugs should reach the 40 percent level for alcohol, the 50 percent level for marijuana, 80 percent for inhalants, and 85 percent for stimulants.

By 1995, the proportion of the population over age 15 that can identify specific appropriate resources for suicide prevention assistance and help in dealing with stress should be greater than 70 percent.

By 1995, 100 percent of all Tribal/PL 93-638 contract schools (K-12) and Head Start Programs serving predominantly American Indian/Alaska Native children will have access to a comprehensive health education program including content on alcohol/substance abuse.

Health Status

By 1995, alcohol cirrhosis mortality will be reduced from 25.3 per 100,000 to 20 per 100,000.

By 1995, the motor vehicle fatality rate of 63.3 per 100,000 will be reduced to 55 per 100,000.

By 1995, the rate of suicide among Indians and Alaska Natives will be reduced from 18.3 per 100,000 to 15 per 100,000.

Appendix B

Glossary

BABES

Beginning Alcohol and Addictions Basic Education Studies (BABES) began as a primary prevention program for children ages 3 to 8. It utilizes a kit that includes puppets, stories, and songs that illustrate real life situations to teach the positive living skills necessary to prevent substance abuse and help young people to have happy, healthy lives.

BABES is based on the concept that children can and will learn how to live successfully with others, and that such learning, coupled with facts about abusive use of alcohol and other drugs, is essential to healthy growth and development.

Here's Looking at You

Here's Looking at You is a complete drug education curriculum that begins in kindergarten and continues through high school. The curriculum (l) addresses known risk factors such as having drug-using friends, living in a family with chemically dependent members, and early first use of drugs, (2) focuses on gateway drugs (drugs that increase the risk of using other drugs) like alcohol, nicotine, and marijuana, and (3) contains clear "no drug use" messages for children.

Project Charlie

Project Charlie is a drug abuse prevention program for elementary school children. Its purpose is to promote the social and emotional growth of children and to discourage chemical use as a way to avoid problems. Project Charlie aims to establish a partnership between school and family and to teach children crucial living skills that can be vital in a child's education. The program emphasizes feeling good strategies drawn from available research, practical application, and experience.

Chemical People

A program designed to get families involved with their children in chemical-free activities and environments. It has a strong drug prevention component.

T.R.A.I.L.S.

A youth program for Alcohol Drug Abuse Prevention for early and late adolescents. T.R.A.I.L.S. is an acronym that stands for testing realities and investigating life styles. The program offers youth alternative activities both traditional and current such as art theory, traditional dancing, cooking, bead and basket work, and recreational programs. The program also offers Health Promotion and Disease Prevention Education geared toward meeting the specified needs of youth. T.R.A.I.L.S. is funded through the State Health Department in Wisconsin, Division of Community Services.

Circles of Life

The Circle of Life—Health and Human Services Training Seminar—is a statewide annual conference held in Michigan since 1980. The conference participants consist of Indian and non-Indian Health and Human Service workers who work with Indian tribes and organizations located within the State of Michigan. Each year's agenda consistently addresses the Health Promotion/Disease Prevention needs of Indian people in a variety of areas, which includes Alcohol/Chemical Dependency Prevention.

Children Are People, Inc.

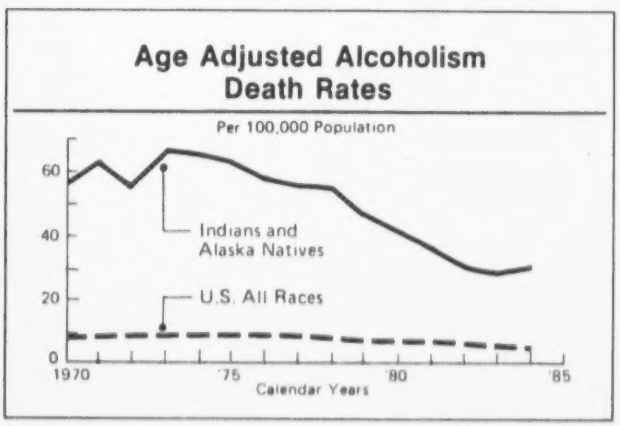
This is a chemical dependency program geared toward elementary school children. The C.A.P. Program strives to involve school administration and support staff, parents, teachers, other helping professionals, and volunteers in the implementation of this program. The C.A.P. program deals with the sociological/emotional implication of drug use and drug abuse. The C.A.P. Program is representative of a community prevention model. For further information write Children Are People, Inc., 1599 Selby Avenue, St. Paul, Minnesota, 55104 (612) 644-3033.

Appendix C

General Mortality Statistics*

CHART 4.23

The age-adjusted alcoholism death rate for American Indians and Alaska Natives has decreased 55 percent since its peak in 1973 of 66.1 deaths per 100,000 population. In 1984, the Indian rate was still 4.8 times the rate for U.S. All Races, 30.0 compared to 6.2.



*From Indian Health Service. *Chart Series Book*. Washington, DC: U.S. Department of Health and Human Services, PHS, Health Resources and Services Administration, April 1987.

TABLE 4.23

ALCOHOLISM DEATHS AND MORTALITY RATES
American Indians and Alaska Natives in Reservation States and U.S. All Races
Age-Adjusted Rates per 100,000 Population, 1969-1984

Calendar Year	Number of Deaths: American Indian and Alaska Native	Number of Deaths: U.S. All Races	Age-Adjusted Rates and Their Ratio: American Indian and Alaska Native	Age-Adjusted Rates and Their Ratio: U.S. All Races	Age-Adjusted Rates and Their Ratio: Ratio of Indian to U.S. All Races
1984	316	15,706	30.0	6.2	4.8
1983	293	15,424	28.9	6.1	4.7
1982	298	15,596	30.7	6.4	4.8
1981	338	16,745	35.8	7.0	5.2
1980	382	17,742	41.3	7.5	5.5
1979	398	17,064	45.1	7.4	6.1
1978	437	18,490	54.5	8.1	6.7
1977	429	18,437	55.5	8.3	6.7
1976	425	18,484	58.2	8.6	6.8
1975	403	18,190	62.2	8.6	7.2
1974	417	18,530	64.2	8.6	7.5
1973	399	17,791	66.1	8.6	7.7
1972	315	17,484	55.0	8.6	6.4
1971	334	16,891	62.9	8.4	7.5
1970	272	16,130	56.2	8.1	6.9
1969	267	15,138	56.6	7.7	7.4

NOTE: For 1969-1978 includes deaths due to alcoholism, alcoholic psychoses and cirrhosis of the liver with mention of alcoholism. For 1979 and after includes deaths due to alcohol dependence syndrome, alcoholic psychoses and chronic liver disease and cirrhosis, specified as alcoholic. Population estimation methodology for the American Indian and Alaska Native population revised in 1976. Maine, New York and Pennsylvania included as Reservation States beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1970 and 1980.

CHART 4.2

The two leading causes of death for American Indians and Alaska Natives ages 15 to 24 years (1982-1984) were accidents and suicide. For the U.S. All Races (1983), they were accidents and homicide.

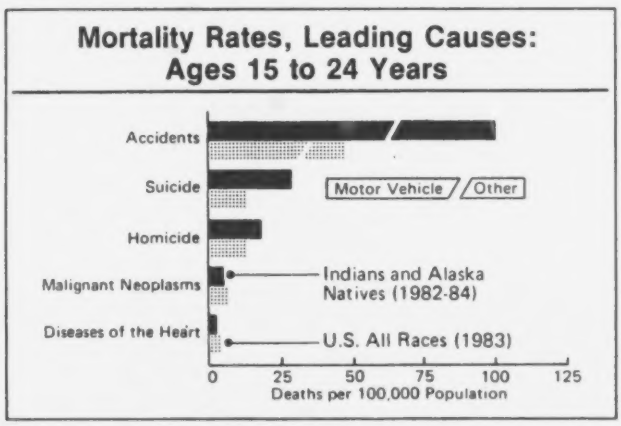


TABLE 4.2

TEN LEADING CAUSES OF DEATH FOR DECEDENTS 15 TO 24 YEARS OF AGE
American Indians and Alaska Natives in Reservation States, 1982-1984
Comparable U.S. All Races Rates, 1983
Mortality Rates per 100,000 Population

Cause of Death	American Indians and Alaska Natives Number	American Indians and Alaska Natives Mortality Rate	U.S. All Races Mortality Rate	Ratio: Indian to U.S. All Races
Total 15 to 24 Years	1,624	176.6	96.0	1.8
Accidents	925	100.6	48.5	2.1
Motor vehicle	604	65.7	35.1	1.9
Other accidents	321	34.9	13.4	2.6
Suicide	249	27.1	11.9	2.3
Homicide	180	19.6	12.4	1.6
Malignant neoplasms	41	4.5	5.6	0.8
Diseases of heart	22	2.4	2.6	0.9
Pneumonia and influenza	10	1.1	0.7	1.6
Congenital anomalies	10	1.1	1.4	0.8
Chronic liver disease and cirrhosis	8	0.9	0.2	4.5
Cerebrovascular diseases	6	0.7	0.8	0.9
Nephritis, nephrotic syndrome and nephrosis	6	0.7	0.2	3.5
All other causes	167			

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984.

Appendix D

School/Community-Based Alcoholism/Substance Abuse Prevention Survey

SCHOOL-BASED
ALCOHOL/SUBSTANCE ABUSE
PRIMARY PREVENTION INVENTORY

PART 1 - DEMOGRAPHICS

DATE: _____

SCHOOL NAME: _____

IHS AREA CODE: _____ _____ NAME: _____

IHS SERVICE UNIT CODE: _____ _____ NAME: _____

RESPONSIBLE PERSON: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: ( ) _____

TYPE OF SCHOOL: (check one only)

_____ BIA

_____ TRIBAL 638/CONTRACT

_____ PUBLIC

_____ PAROCHIAL

_____ OTHER

STUDENT POPULATION: (check as many as appropriate)

_____ HEADSTART/EARLY CHILDHOOD EDUCATION

_____ ELEMENTARY SCHOOL

_____ JUNIOR HIGH/MID SCHOOL

_____ SENIOR HIGH SCHOOL

SCHOOL-BASED
ALCOHOL/SUBSTANCE ABUSE
PRIMARY PREVENTION INVENTORY

PART 2 - INVENTORY

DATE: _____

SCHOOL NAME: _____

SCHOOL YEAR: _____ (i.e. 1985-1986)

IHS AREA CODE AND SERVICE UNIT CODE /___/___/___/___/

1. PROGRAM JUSTIFICATION FOR PLANNING ALCOHOL/SUBSTANCE ABUSE CURRICULUM:
(check as many as applicable)

_____ Attendance problem

_____ Disciplinary problem

_____ Low self-concept

_____ Low academic achievement

_____ Truancy

_____ Marijuana

_____ Inhalants

_____ Alcohol

_____ Cigarettes

_____ Smokeless tobacco

_____ Health problems (i.e., obesity, handicapped, pregnancy)

_____ Other substance abuse, specify: _____

2. NETWORKING WITH COMMUNITY GROUPS:
(Enter the number of individuals from the community groups/agencies listed below, who participated in the school-sponsored alcohol/subtance abuse prevention curriculum)

_____ IHS

_____ BIA

_____ Tribal

_____ Parents

_____ Alcoholism/Substance Abuse Program

_____ Church

_____ CHR Program

_____ School

_____ Others, specify: _____

PART 2 - INVENTORY
(CONTINUED)

3. TYPES OF CURRICULUM USED IN YOUR SCHOOL:
(check as many as applicable)

_____ BABES

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Project CHARLIE

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ DARE to be You

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

PART 2 - INVENTORY
(CONTINUED)

_____ Here's Looking at You

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Local Curriculum

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Topical Substance Abuse Curriculum

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Others, specify: _____

_____

_____

_____

PART 2 - INVENTORY
(CONTINUED)

4. CONTENT AREAS INCLUDED IN CURRICULUM:
(check as many as applicable)

_____ History of alcoholism/substance abuse among American Indians/Alaska Natives

_____ Physical and emotional effects of alcohol/substance abuse

_____ Self-awareness and culture identity issues

_____ Values and attitude clarification

_____ Peer pressure and decision making

_____ Effective communication

_____ Family bonding and enrichment

_____ Risks to children of alcoholics

_____ Fetal Alcohol Syndrome Prevention

_____ Other, specify: _____

5. ENTER THE NUMBER OF INDIVIDUALS INVOLVED IN THE TEACHING OF PREVENTION CURRICULUM FROM THE ORGANIZATIONS LISTED BELOW:

_____ Tribal

_____ School

_____ IHS

_____ Parents

_____ BIA

_____ Others, specify: _____

PART 2 - INVENTORY
(CONTINUED)

6. INDICATE TYPES OF MASS MEDIA RESOURCES USED TO HELP PREVENT ALCOHOL/SUBSTANCE ABUSE BY YOUR SCHOOL:
(check all that apply, enter amounts if applicable)

_____ TV/Cable TV
_____ Total number of spots
_____ Number of different messages

_____ Radio
_____ Total number of spots
_____ Number of different messages

_____ Posters
_____ Number of different posters

_____ Pamphlets
_____ Number of different pamphlets

_____ Other
_____ Number of different messages

7. INDICATE TYPES OF PREVENTIVE INTERVENTION ACTIVITIES PROVIDED BY YOUR SCHOOL: (check all that apply)

_____ SADD
_____ MADD
_____ Chemical People
_____ Other Outreach
_____ Workshops/Training
_____ Self help/Support groups
_____ Peer Group Counseling
_____ Referral for Counseling
_____ Others, specify: _____

PART 2 - INVENTORY
(CONTINUED)

8. SPECIFY CURRICULUM EVALUATION TECHNIQUES USED BY YOUR SCHOOL:

_____ Paper pencil alcohol/substance abuse knowledge test

_____ Course evaluation

_____ Curriculum evaluation

_____ Self-rating scales to determine personal-social-attitudinal growth and developments

9. CHECK ALL THE FOLLOWING POSITIVE OUTCOME INDICATORS WHICH RESULTED FROM YOUR PREVENTIVE CURRICULUM AND PREVENTION ACTIVITIES:
(Please justify with pertinent data)

_____ Increased participation in outreach programs

_____ Conducted workshops/training

_____ Reduced truancy

_____ Increased attendance

_____ Decreased disciplinary problems

_____ Increased number of graduates

_____ Increased self-concept

_____ Reduced alcohol use

_____ Reduced substance abuse

_____ Reduced health problems

_____ Others, specify: _____

_____

10. IN ORDER TO FULLY EXAMINE ON-GOING SCHOOL-BASED ALCOHOL/SUBSTANCE ABUSE PRIMARY PREVENTION PROGRAMS THAT HAVE POTENTIAL FOR REPLICABILITY, PLEASE USE THE ATTACHED "SCHOOL-BASED PRIMARY PREVENTION OPTIONAL REPORTING FORM" TO DESCRIBE YOUR PROGRAM/S.

SCHOOL-BASED
PRIMARY PREVENTION REPORTING FORM
(OPTIONAL)

NAME OF PROGRAM: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: ( ) _____

CONTACT PERSON/S: _____ POSITION: _____

_____ _____

TARGETED GROUP/S: _____

PROGRAM OBJECTIVES: _____

_____

_____

PROGRAM METHODS EMPLOYED: _____

_____

_____

_____

_____

_____

POSITIVE OUTCOME INDICATORS: _____

_____

_____

_____

ANNUAL NUMBER OF PERSONS SERVED (UNDUPLICATED): _____

OTHER PROGRAM INFORMATION: _____

_____

_____

(USE ADDITIONAL SHEETS AS NECESSARY)

COMMUNITY-BASED
ALCOHOL/SUBSTANCE ABUSE
PRIMARY PREVENTION INVENTORY

PART 1 - DEMOGRAPHICS

DATE: _____

COMMUNITY NAME: _____

YEAR: _____ (i.e. 1985-1986)

IHS AREA CODE: _____ _____ NAME: _____

IHS SERVICE UNIT CODE: _____ _____ NAME: _____

RESPONSIBLE PERSON: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: ( ) _____

TARGET POPULATION: (check as many as appropriate)

_____ PARENTS

_____ SINGLE PARENTS

_____ WOMEN

_____ MEN

_____ AGE OVER 65

_____ YOUTH

_____ TRIBAL EMPLOYEES

_____ GOVERNMENT EMPLOYEES

_____ OTHERS, specify: _____

COMMUNITY-BASED
ALCOHOL/SUBSTANCE ABUSE
PRIMARY PREVENTION INVENTORY

PART 2 - INVENTORY

DATE: _____

COMMUNITY NAME: _____

YEAR: _____ (i.e. 1985-1986)

IHS AREA CODE AND SERVICE UNIT CODE /____/____/____/____/

1. PROGRAM JUSTIFICATION FOR PLANNING ALCOHOL/SUBSTANCE ABUSE CURRICULUM:
(check as many as applicable)

_____ Fetal Alcohol Syndrome

_____ Fetal Alcohol Effect

_____ Alcohol/substance abuse related arrests

_____ Alcohol/substance abuse related family violence

_____ Alcohol/substance abuse related child abuse/neglect

_____ Alcohol/substance abuse related accident

_____ Vehicle

_____ Drowning

_____ Fire

_____ Smokeless tobacco

_____ Alcohol/substance abuse related pregnancies

_____ Alcohol/substance abuse related morbidity and mortality

_____ Cirrhosis

_____ Acute hospital/clinic admissions

_____ Homicides

_____ Suicides

_____ Trauma

_____ Others, specify: _____

PART 2 - INVENTORY
(CONTINUED)

2. NETWORKING WITH COMMUNITY GROUPS:
(From the groups listed below, please indicate the number of individuals who participated in the community-sponsored alcohol/substance abuse prevention program activities)

_____ IHS

_____ BIA

_____ CHR program

_____ Parents

_____ Alcoholism/Substance Abuse Program

_____ Others, specify: _____

_____ Tribal

_____ School

_____ Church

3. TYPES OF PROGRAMS USED IN YOUR COMMUNITY:
(Check as many as applicable)

_____ BABES

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Project CHARLIE

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

PART 2 - INVENTORY
(CONTINUED)

_____ DARE to be You

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Here's Looking at You

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Trails

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

PART 2 - INVENTORY
(CONTINUED)

_____ Chemical People

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Circle of Life

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Parent Effectiveness Training

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

PART 2 - INVENTORY
(CONTINUED)

_____ Children of Alcoholics

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Locally Self-Developed Program

_____ Number of sessions

_____ Number of students

Frequency

_____ weekly

_____ bi-monthly

_____ monthly

_____ other

_____ Others, specify: _____

_____

_____

_____

PART 2 - INVENTORY
(CONTINUED)

4. CONTENT AREAS INCLUDED IN PROGRAM:
(check as many as applicable)

_____ Decision making skills development

_____ Alcohol/substance abuse education

_____ Effective parenting

_____ Awareness of community resources

_____ Single parenting activities

_____ Building self-esteem (concept) and coping skills

_____ Family bonding and enrichment

_____ Developing mutual-help and self-help support groups

_____ Creating health promotion/disease prevention activities

_____ Others, specify: _____

5. ENTER THE NUMBER OF PARTICIPANTS INVOLVED IN THE TEACHING OF PREVENTION PROGRAMS FROM THE GROUP/S BELOW:

_____ Tribal

_____ School

_____ IHS

_____ Parents

_____ BIA

_____ Others, specify: _____

PART 2 - INVENTORY
(CONTINUED)

6. INDICATE TYPES OF MASS MEDIA RESOURCES USED TO HELP PREVENT ALCOHOL/SUBSTANCE ABUSE BY YOUR COMMUNITY:
(check all that apply, enter amounts if applicable)

_____ TV/Cable TV
_____ Total number of spots
_____ Number of different messages

_____ Radio
_____ Total number of spots
_____ Number of different messages

_____ Posters
_____ Number of different posters

_____ Pamphlets
_____ Number of different pamphlets

_____ Other
_____ Number of different messages

7. INDICATE TYPES OF PREVENTIVE INTERVENTION ACTIVITIES PROVIDED BY YOUR COMMUNITY: (check all that apply)

_____ SADD
_____ MADD
_____ Chemical People
_____ Workshops/Training
_____ Self help/Support groups
_____ Alcohol/Substance abuse counseling/referral
_____ Defensive Driving Course
_____ Employee Health Promotion
_____ Summer Camps
_____ Drivers Education
_____ Others, specify: _____

8. SPECIFY PROGRAM EVALUATION TECHNIQUES USED BY YOUR COMMUNITY:

_____ Questionnaires

_____ Opinionnaires

_____ Attitudinal Scales

_____ Interviews and conversations

_____ Observation schedules and interaction analyses

_____ Active participation and participant observer

_____ Historical, biograhic and anecdotal

_____ Rating scales and checklists

9. CHECK ALL THE POSITIVE OUTCOME INDICATORS LISTED BELOW WHICH RESULTED FROM YOUR PREVENTION PROGRAM ACTIVITIES:
(Please justify with pertinent data)

_____ Conducted workshops/training

_____ Increased participation in outreach programs

_____ Reduced alcohol/substance abuse related:

- _____ Accidents
- _____ Arrests
- _____ Family violence
- _____ Child abuse/neglect
- _____ Teen-age pregnancy
- _____ Cirrhosis
- _____ Acute episodes of hospital/clinic admission
- _____ Homicide
- _____ Suicide
- _____ Trauma

_____ Reduced Fetal Alcohol Syndrome

_____ Reduced Fetal Alcohol Effects

_____ Reduced alcohol/substance abuse

_____ Others, specify: _____

☆U.S. Government Printing Office: 1987-194-615:30208

IHS
U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration
Indian Health Service
Printed 1987